

Best Practices Report # 19

Best Practices for Families with Children Who Experience Substance Abuse, Juvenile Delinquency, and Serious Emotional Disturbance

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Best Practice Report # 19

Family Therapy with Children Who Experience Substance Abuse, Juvenile Delinquency, and Serious Emotional Disturbance

Executive Summary

The needs of children who experience substance abuse, juvenile delinquency, and Serious Emotional Disturbance (SED) are significant. They experience increased rates of school failure and drop-out, unintended pregnancy, sexually transmitted diseases, out-of-home placement, unemployment and under-employment as adults, poor health, divorce, incarceration, and suicide (Liddle et al., 2001; Davis and Vander Stoep, 1997; Loeber, 1990). During recent decades, there has been a shift among professionals who serve these populations in reference to how best provide treatment and assistance (Henggeler et al., 1997). Consistent with the work of Broffebrenner (1979), it is now recognized that children exist within multiple systems that influence their behavior. These systems include family, peer, school, and community. It has also been documented that modalities which involve families in the treatment of adolescents can significantly improve outcomes (Robinson et al., 2005; Liddle et al., 2001; Santisteban et al., 1996). Moreover, it is particularly well-documented that parents of SED children desire interventions that are family-centered (Ditrano & Bordeaux, 2006; Spencer & Powell, 2000; Kruzich, Jivanjee, Robinson, and Friesen, 2003).

This emphasis on the impact of multiple systems on children's behavior has led to the development of four helping modalities that specifically recognize the family as an essential agent of change: **Multisystemic Therapy (MST), Brief-Strategic Family Therapy (BSFT), Multidimensional Family Therapy (MDFT), and Functional Family Therapy (FFT)**. This Best Practice Report outlines the history and development of each modality, as well as each research base, fidelity protocol, and strengths and weaknesses. They all have relatively similar histories, in that all four approaches have been in development for at least 25 years and have some level of empirical research base.

MST's research base is by far the most well-developed and it has been used with diverse populations ranging from juvenile offenders (Henggeler, Melton, & Smith, 1992; Henggeler et al., 1986; Bourdin et al., 1995), to adolescent sex offenders (Bourdin, Henggler, Blaske, & Stein, 1990), to maltreating families (Brunk, Henggeler, & Whelan, 1987), and as an alternative to psychiatric hospitalization (Schoenwald, Ward, Henggeler, & Rowland, 2000). Treatment fidelity is also an emphasis; however, specific fidelity protocols have varied over time. Despite the considerable research base, groups outside of the MST organization have experienced difficulty in replicating positive outcomes (Littell, Pops, & Forsythe, 2005). Moreover, it is a very costly modality and worker burn-out and high turnover has been documented as a serious problem (Lescheid, 2002).

BSFT has a smaller research base, but this group has done three significant randomized studies regarding engaging families in services (Szapocnik et al., 1986; Santisteban et al., 1996; Santisteban et al., 1996). It also appears to be more affordable than MST and worker burn-out has not been documented as problematic. As with MST, treatment fidelity is part of

implementation, however, the term seems to be inconsistently conceptualized and operationalized. Another weakness of this model is that it has been utilized exclusively with Latino and African-American youth who experience substance abuse and behavioral problems and its applicability to other populations is not yet known.

MDFT has a research base similar in size to **BSFT**, but utilizes more rigorous research designs. Moreover, **MDFT** has a saliently developed, strictly implemented fidelity protocol that has been relatively consistent throughout all studies. Research is largely limited to youth who experience problems with substance abuse. **MDFT** also has a corresponding prevention model (Multidimensional Family Prevention) that has produced promising outcomes with adolescents who are at risk for substance abuse and behavioral problems (Hogue, Liddle, Becker, & Johnson-Leckrone, 2002). The cost of utilization was never specifically mentioned in published reports.

FFT has an even smaller research base with a very limited number of randomized trials. This modality has been used largely with juvenile offenders, although a recent study (Waldron et al., 2001) examined its application to substance abusing adolescents. As with **BSFT**, workers are only expected to meet with families once or twice per week, thus avoiding the burn-out experienced by **MST** service providers. Although fidelity protocol over time has been inconsistent, a significant strength of this model is the well-developed treatment fidelity component which is presently used. Due to licensing fees, training costs, and maintenance fees, the cost of utilizing **FFT** appears to be consistent with the cost of utilizing **MST**.

Additionally, **this report includes the results of a phone survey of Kansas Community-Based Service Directors.** The survey addressed estimates of **SED** children receiving family therapy in the respective **CMHCs**, models of family therapy utilized, and barriers to family-centered service provision, among other questions. **The survey results indicate that family therapy appears to be infrequently utilized among CMHCs,** who use a variety of models, including Structural, Strategic, Cognitive Behavioral, Solution Focused, Family Systems, and Family-Directed Structural Therapy. Barriers to utilizing family-centered service include family resistance to involvement, lack of compensation for travel time to families' homes, and lack of training in family-centered models. Suggestions to the state to address these barriers include examining existing models of family engagement, examining alternative formulas for travel and mileage compensation, and emphasizing family-centered initiatives currently underway in the state.

Finally, family therapy initiatives in the state are discussed. Current initiatives include an outcome study at two CMHCs, which is measuring the effectiveness of Family-Directed Structural Therapy, an innovative family therapy model that originated in Kansas; and the Home-Based Family Therapy Partnership, a training program for home-based family therapists which is facilitated by Kansas State University.

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Historical Perspective and Literature Review

While the development of family therapy has not taken a direct evolutionary path, its roots can be traced to the child guidance clinics of the early to mid-1900s. It was in this setting that the idea of engaging not only the identified patient (the child) in treatment, but also including a parent (most often, the child's mother). While not family therapy in the modern sense, it was a step toward acknowledging that children's mental health issues do not exist in a vacuum, and are influenced by the familial environment (Nichols & Schwartz, 2001).

In addition to this influence, early studies of the etiology of Schizophrenia paid heed to the influence of family, although not always in a particularly flattering manner. In the 1940s, David Levy and Frieda Fromm-Reichmann termed the label "schizophrenogenic mother", a term which essentially blamed the parents (or more specifically, the mother) for the child's mental health problems (Fromm-Reichmann, 1948). The luxury of historical hindsight illustrates the misguided nature of this perspective, however, the concept focused attention on parent-child dynamics.

Following this work, Gregory Bateson, Jay Haley, John Weakland, and Don Jackson at the Mental Research Institute were funded by the Rockefeller Foundation in the early 1950s to study familial communication and its relationship to the etiology of Schizophrenia. Specifically, they postulated that psychotic behavior might make sense within pathological family communication. One of their best known works, "Toward a Theory of Schizophrenia" describes this theory and their conclusions (Bateson, Jackson, Haley, & Weakland, 1956).

Gale and Long (1996) refer to the 1950s as the "founding decade of family therapy" (p. 1). During this time, various schools of family therapy developed, all with their own perspective regarding the nature of family functioning (Gale & Long, 1996). These differing perspectives led to relatively diverse ways in which practitioners of these assorted models approached family treatment (Sprenkle, 2002). While certainly not an exhaustive list of family therapists of this era, and moreover, only a brief snapshot of components of included modalities, the following illustrates the diversity of thought and approach of the time.

- Developers of Strategic Family Therapy at the Mental Research Institute posited that families were "homeostatic units" and, as such, were inherently resistant to change (Jackson & Weakland, 1959).
- Murray Bowen encouraged family members not to talk to each other during session, but to him. His work around triangulation in relationships, as well as differentiation of self, are indicative of the familial emotional context within which he conceptualized his work (Bowen, 1961).
- Ivan Boszormenyi-Nagy conceptualized network therapy at the Eastern Pennsylvania Psychiatric Institute in Philadelphia. He invited as many people as possible to attend

the child's therapy session to discuss ways to help and support patient (Speck & Attneave, 1973).

- Salvador Minuchin based his work on the structure of families and the relationship of roles in the family. Among his techniques were joining with the family and restructuring, which consisted of maneuvers to disrupt unhealthy family structures (Minuchin & Fishman, 1981).
- Virginia Satir believed that emotional suppression was the cause of family problems and the goal of Experiential Therapy was to enable family members to identify and express their true emotions (Satir, 1972).

By the end of the 1980s, these and other models began to lose popularity because of death or retirement of the founder, lack of central figure to continue development and dissemination of the model, and lack of empirical support for the models. Sexton, Weeks, and Robbins (2003) refer to this era as the “first generation” of therapeutic modalities, observing that they were “built on a set of founding constructs that represented a relationally and systematically based way of thinking about clients, therapy, and the mechanisms of change” (p. xxii).

One of the most significant trends in family therapy during the past twenty years has been the erosion of boundaries between these original schools of thought. The greatest impetus for this dynamic, most likely, lies in the growing recognition that families need to be approached with a flexible helping framework (Sprenkle, 2002). Historically, practitioners held tightly to their models. If those particular guiding principles and prescribed techniques did not help the family, the family was labeled “resistant”, “sabotaging”, or “not appropriate for treatment”. For example, in the early work the Mental Research Institute, the family was described as “homeostatic”, a unit that resists change. This is an assumption which served as a cornerstone of this school of thought. When viewed from a historical perspective, it would seem to allow the therapist to make assumptions about families’ willingness to change, or more importantly, lack thereof.

Sexton, Weeks, and Robins (2003) posit that over the past twenty years, “schools” of therapy have given way to “common factors”. Specifically, they note that the “theoretical foundations of family therapy have become increasingly integrative, research-based, and multisystemic” (p. xxii). While there are certainly other forms of present day family therapy (i.e. Psychodynamic, Solution-Focused, Cognitive-Behavioral, Strategic, Structural, Narrative), the integrative, multisystemic models have received the majority of scientific inquiry and study.

Currently, family therapy is largely characterized by models that share common multisystemic themes (that is, focusing on accessing and/or altering the systems surrounding a client) and are frequently “problem specific” (i.e. adolescent substance abuse and adolescent anti-social behavior) (Sprenkle, 2002). This multidimensional focus can be traced to the work of Brofferbrenner (1979) and the idea that children are embedded with multiple systems that influence their behavior. As a result of this understanding, there has been a shift in the way in which child and adolescent substance abuse, behavioral, and emotional problems are conceptualized. Specifically, the child is no longer seen as an entity to be treated, but as a part of other larger systems which impact the child's functioning (Henggeler et al., 1986). Thus the advent of multidimensional and systemic modalities, including Multisystemic Therapy,

Functional Family Therapy, Brief Strategic Family Therapy, and Multidimensional Family Therapy. The following sections will summarize these approaches. Only studies which have peer reviewed and published, were conducted in the United States, and utilized a quasi-experimental or experimental design are included in this analysis.

Finally, these four modalities share the trait of having some type of fidelity or adherence measure and/or protocol. Treatment adherence according to Waltz, Addis, Koerner, and Jacobson (1993), is defined as the “extent to which interventions are used” (p. 620). Treatment adherence has gained increasing attention in recent years, with both researchers and clinicians becoming interested in being able to link certain, specific interventions with particular outcomes. While these four modalities all differ in their approach to fidelity or adherence checks, they all have some mechanism in place to serve this purpose. Despite the increasing interest in this facet of service delivery, a 2005 meta-analysis of 236 studies of child psychiatric disorders by Weisz, Doss, and Hawley found only 32% of the studies from 1965 to the 2002 had any form of adherence checks.

Multisystemic Therapy

(cross referenced in Table I – the number in parentheses following the citation indicates its corresponding placement in Table I)

MST: History and Background

Multisystemic Therapy (MST) is a home-based service approach that provides integrative, family-centered treatment. According to Henggeler (1997), it was developed in the last twenty years in response to the lack of scientifically proven, cost-effective treatment for children who display behaviors that place them at risk for out-of-home placement. MST was specifically designed to respond to the needs of adolescents who exhibit serious anti-social behavior (Henggeler, 1997), but has also been applied to situations of abuse and neglect, as an alternative to psychiatric hospitalization, and adolescent sex offenders.

This modality consists of nine guiding principles, including: 1) The primary purpose of assessment is to understand the fit between the identified problems and their broader systemic context; 2) Therapeutic contacts emphasize the positive and use systemic strengths as levers for change; 3) Interventions are designed to promote responsible behavior and decrease irresponsible behavior among family members; 4) Interventions are present focused and action oriented, targeting specific and well-defined problems; 5) Interventions target sequences of behavior within and between multiple systems that maintain identified problems; 6) Interventions are developmentally appropriate and fit the developmental needs of the youth; 7) Interventions are designed to require daily or weekly effort by family members; 8) Intervention effectiveness is evaluated continuously from multiple perspectives with providers assuming accountability for overcoming barriers to successful outcomes; 9) Interventions are designed to promote treatment generalization and long-term maintenance of therapeutic change by empowering caregivers to address family members’ needs across multiple systemic contexts (Henggeler, Schoenwald, Bourdin, Rowland, & Cunningham, 1998, p.23).

MST is designed to be provided to families for three to five months, with each therapist carrying a caseload of four to six families. Therapists are available 24 hours, seven days a week to respond to crises. Treatment teams consist of three to five therapists and a clinical supervisor. (Schoenwald, Sheidow, & Letourneau, 2004). Across all interventions, MST focuses on changing the youth's natural settings of home, school, and neighborhood in order to promote prosocial behavior (Henggeler, 1986).

MST: Research Base

Many MST studies have been conducted in the last 25 years, producing a substantial research base. This report includes ten randomized trials, one quasi-experimental study, and three studies which specifically address fidelity of MST implementation. While there has been some use of MST with SED children, maltreating parents, and juvenile sex offenders, a significant portion of MST research has focused on its use with families of juvenile offenders and youth with substance abuse problems.

In a quasi-experimental study, Henggeler et al. (1986) (#1) assigned 80 juvenile offenders to an MST group (n=57) or to a condition which received outpatient mental health services (n=23). The mean age was 14.8 years, with 65% of the adolescents being African American and 35% being Caucasian. Male/female split was not reported. Treatment lasted until "identified problems were ameliorated or further therapeutic change was unlikely" (p. 135), with hours of service provision ranging from 2 to 47. Forty-four comparison participants were selected from a pool of juveniles who were in a diversion program. Pre and post-test measures including the Behavior Problem Checklist (Quay, 1977), Eysenck Personality Inventory (Eysenck & Eysenck, 1963), Family Relationship Questionnaire (Henggeler & Tavormina, 1980), and Unrevealed Differences Questionnaire (Henggeler & Tavormina, 1980), found MST to be "more effective than 'usual community services' in decreasing adolescent behavioral problems and improving family relations, especially communication and affect" (p.138). Seventy-five percent of the sample completed treatment. Treatment adherence was monitored via weekly, two hour MST supervision sessions utilizing audio or video-taped family sessions.

Henggeler, Melton, and Smith (1992) (#2) continued studying the application of MST to juvenile offenders in an inquiry involving 84 youths randomly assigned to MST (n=41) or usual probation and mental health services (n=43). The mean age of the adolescents was 15.2 years, 77% were male/23% female, and 56% were African American, 42% Caucasian, and 2% Hispanic. The average duration of treatment for the MST group was 13.4 weeks, including 33 hours of service delivery. Average duration of probation and mental health services for the control group was not discussed.

Seventy-seven percent of the sample completed pre and post-test measures including the Family Adaptability and Cohesion Evaluation Scale III (Olson, Portner, & Lavee, 1985), the Missouri Peer Relations Inventory (Borduin et al., 1989), the Revised Behavior Problem Checklist (Quay & Peterson, 1987), social competence scale of the Child Behavior Checklist (Achenbach & Edelbrock, 1983), and the Symptom Checklist – 90- Revised (Derogatis, 1983). Criminal records were also reviewed. At 59 weeks post-referral, MST youth had fewer arrests and self-reported offenses, and spent an average of 10 fewer weeks incarcerated. The MST

condition also reported increased family cohesion and decreased youth aggression. Treatment adherence was facilitated via three days of MST training, one hour of weekly MST supervision, a one hour weekly phone consultation with first author, a one day MST booster session every two months, and periodic review of case notes by an MST supervisor.

Bourdin et al. (1995) (#3) randomly assigned 176 juvenile offenders to MST (n=92) or community –based individual therapy (IT) (n=84). The adolescents ranged in age from 12 to 17 years, with 68% being male and 32% being female. Seventy percent were Caucasian and 30% were African American. IT was based upon psychodynamic, client-centered, and behavioral techniques that specifically focused on the adolescent, not on the systems surrounding the adolescent. Frequency and duration of service delivery were not specified, but the mean hours of treatment for MST was 23.9, while for IT the mean was 28.6. Measures included criminal record, the Family Adaptability and Cohesion Evaluation Scale III (Olson, Portner, & Lavee, 1985), the Missouri Peer Relations Inventory (Borduin et al., 1989), the Revised Behavior Problem Checklist (Quay & Peterson, 1987), and the Symptom Checklist – 90- Revised (Derogatis, 1983). All measures were collected pre and post-treatment, with criminal activity examined four years following the conclusion of the study. Treatment adherence was monitored via MST therapists session summaries and weekly, three hour meetings with the first author.

At conclusion of treatment, 79.5% of the sample completed treatment and MST families reported increased cohesion/adaptability, while IT families reported decreased cohesion/adaptability. MST families stated there was improved family supportiveness, while IT families reported decreased family supportiveness. There was no reported treatment effect for either group in reference to peer relations. Four years post treatment, IT youth had a recidivism rate over three times that of MST youth.

Henggeler et al. (1997) (#4) randomly assigned 155 chronic juvenile offenders to MST (n=82) or usual juvenile justice services (n=73). The participants had a mean age of 15.2 years, were 82% male/18% female, and 81% were African American/19% Caucasian. Usual juvenile justice services included six months probation, monitoring of school attendance, referral to outpatient psychotherapy, and alcohol and drug services. Families in the MST condition averaged approximately 120 days in treatment, while the participants in the usual services group were placed on probation for no less than six months and referred to social service agencies as needed. Pre and post-test data collection included criminal activity, Brief Symptom Inventory (Derogatis, 1993), Family Adaptability and Cohesion Evaluation Scale III (Olson, Portner, & Lavee, 1985), the Revised Behavior Problem Checklist (Quay & Peterson, 1987), and the Missouri Peer Relations Inventory (Borduin et al., 1989). There was a 90% family retention rate.

While the functioning of the youths and their families was monitored, the secondary purpose of this study was to determine whether the effectiveness of MST could be maintained in a community mental health setting when MST experts did not provide significant clinical oversight. Instead, to measure treatment adherence, families completed the MST Adherence Measure to document therapist adherence to MST protocol. To facilitate treatment adherence, therapists received a five-day orientation to MST, quarterly booster sessions, weekly supervision (not with an MST expert), and weekly integrity checks via consultation with an MST expert.

MST youth reported decreased psychiatric symptomatology at post-treatment and this group had incarceration rate of less than half that of the usual services group. However, treatment effects were not observed in either group in reference to family relations or peer relations, and the MST group did not decrease criminal activity to a statistically significant degree. The authors point out that outcomes were better in cases where MST treatment adherence was higher, thus highlighting the importance of treatment fidelity.

Henggeler, Pickrel, and Brondino (1999) (#5) studied 118 juvenile offenders with significant alcohol and drug problems. Eighty percent of the youth were male, with 20% being female. Fifty percent were African American, 16% were Caucasian, 15% were Hispanic, and 16% were from other racial groups. The mean age of the participants was 16 years. Youth were randomly assigned to MST or usual services (US), which included outpatient, inpatient, and/or residential substance abuse and mental health services. Youth were in treatment for up to six months, with MST service provision ranging from 12-187 hours. Outcome measures included criminal activity, drug and alcohol use, and out-of-home placement.

At post-test, the 98% of youth that completed treatment demonstrated a statistically significant decrease in drug and alcohol use, but this was not maintained at a six month follow-up. Moreover, the MST group did not experience a statistically significant decrease in criminal activity and there was no statistically significant difference in the two groups' drug/alcohol use or criminal activity at the six month follow-up. Fidelity assessments indicated MST treatment adherence was low, leading the authors to hypothesize that lax treatment fidelity accounted for the poor outcomes.

In addition to being used with juvenile offenders and their families, MST has been used with adolescent sex offenders (Bourdin et al., 1990) (#9). Sixteen male adolescent sex offenders and their families were randomly assigned to MST (n=8) or community-based out-patient counseling (n=8), with 62% of the sample completing treatment. The adolescents' mean age was 14 years, with 63% being Caucasian and 37% being African American. The sole outcome measure was re-arrest, measured anywhere from 21-49 months post treatment. At a three year follow-up, MST clients had 1/6 the rate of re-arrest for sexual crimes as of out-patient client. In addition to a very small sample, another limitation of this study was that only five members of each group completed the study. Treatment adherence was monitored via weekly, two and one-half hour supervisory sessions with the second author.

Multisystemic Therapy has also been utilized with youth experiencing abuse/neglect (Brunk, Henggeler, & Whelan, 1987) (#6). Forty-three maltreating families were randomly assigned to MST (n=21) or clinic-based behavioral parent training (n=22). The average age of the children in this study was 11.2 years. Fifty-five percent were male and 45% percent were female, while 57% percent were Caucasian and 43% were African American. Each group received one and one-half hours of therapy per week for eight weeks. Pre and post-test measures included the Symptom Checklist-90 (Derogatis, Lipman, & Covi, 1973), the Behavior Problem Checklist (Quay & Pearson, 1975), the Family Environment Scale (Moos & Moos, 1981), the Family Inventory of Life Events and Changes (McCubbin, Patterson, & Wilson, 1985), and the Treatment Outcome Questionnaire (developed for MST). All participating families completed pre-test and post-test questionnaires.

Families who received either treatment showed reduced adult psychiatric symptomatology, decreased overall stress, and a reduction in presenting problems. Parent training was more effective than MST in decreasing social problems, but MST was more effective than parent training in restructuring parent-child relations. A significant limitation of this study is that treatment adherence measures were not utilized for either intervention.

A study utilizing MST with children facing psychiatric hospitalization has explored yet another application of this modality (Schoenwald et al., 2000) (#7). One-hundred thirteen youth were randomly assigned to home-based MST (n=57) or hospitalization (n=56) for psychiatric stabilization and analyzed four months post-approval for hospital services. The children were 65% male/35% female, with an average age of 13 years. Sixty-four percent were African American, 34% were Caucasian, and 2% were Asian American. No families dropped out of this study. MST was altered for this study, in that caseload size was decreased to three families per therapist, therapist supervision was increased, and crisis caseworkers were made available to the therapists.

Days of hospitalization and out-of home placement served as outcome measures. Youth and their families were followed for four months. In a significant proportion of MST youth, hospitalization was avoided and the reduction of hospital use was not offset by the use of other out-of-home services. Youth in the hospitalization group experienced double the days of out-of-home placement in comparison to MST youth. Treatment adherence was monitored via analysis of randomly selected audio-tapes and caregiver/youth ratings of therapist adherence.

Henggeler et al., (2003) (#8) completed a one year follow-up study to the above inquiry (Schoenwald et al., 2000) (#7). They reported that the differences found at the four month follow-up generally dissipated by 12 to 16 months post recruitment. The authors posited that the needs of SED children are particularly intense, and a time-limited model such as MST as currently conceptualized, is not able to meet the chronic issues which this population experiences.

Rowland, Halliday-Boykins, Henggeler, and Cunningham et al. (2005) (#10) implemented a study on the island of Oahu designed to randomly assign 200 families whose SED children were at risk for out of home placement to either MST or Continuum of Care (COC) services. COC services were usual services which ranged from out-patient services to varying levels of residential treatment. Due to systemic issues which resulted in a lack of participants (31 families by termination at thirteen months) and inconsistent application of MST principles, the project was terminated early. The thirty-one families had completed six month follow-up data and this was data used for analysis.

Fifty-eight percent of the youth were male, with an average age of 14.5 years. Eighty-four percent were multiracial (combinations of Asian, Caucasian, and Pacific Islander), 10% were Caucasian, and 7% were Asian American and Pacific Islander. Measures utilized included Child Behavior Checklist (Achenbach, 1991), The Youth Risk Behavior Survey (Kolbe, Kann, & Collins, 1993), The Personal Experience Inventory (Winters & Henly, 1989), Self-Report Delinquency Scale (Elliott, Ageton, Huizinga, Knowles, & Canter, 1983), Family Adaptability

and Cohesion Evaluation Scales-Third Edition (Olson, Portner, & Lavee, 1985), Social Support Questionnaire (Sarason, Sarason, Shearlin, & Pierce, 1987), and arrest records and data on days in out-of home placement were also examined.

MST youth reported significantly greater decreases in CBCL externalizing and internalizing symptom scores, while treatment effect was not observed in reference to substance use. Youth in treatment group experienced a significantly greater reduction in self-reported minor criminal activity. While not statistically significant, youth receiving only usual services averaged 60% more arrests per month than participants assigned to MST. No treatment effect was observed on family adaptability or cohesion. Finally, satisfaction with social support increased for caregivers in the MST group, but decreased for usual services caregivers.

Treatment adherence was facilitated through a 5-day MST orientation, weekly supervision, analysis of MST sessions for treatment fidelity, telephone consultation, and familial completion of the MST Treatment Adherence Measure twice per month.

Henggeler et al. (2006) (#11) randomly assigned 161 adolescents entering the juvenile justice system to one of four conditions. Youths averaged 15.2 years of age and 83% were male. Sixty seven percent were African American, 31% White, and 2% biracial. Youths in the first condition, Family Court (FC) (n=33) appeared before a family court judge one to two times per year. They also received outpatient alcohol and drug abuse services from a state-funded alcohol and drug treatment facility. These participants received intensive group treatment for 12 weeks, as well as 12 weeks of clinic based individual and family group therapy.

The second condition, Drug Court (DC) (n= 31) offered the same services as FC, except that youths attended drug court once per week for 12 months, which included a urine drug screen and youth and caregiver completion of questionnaires specific to the juvenile's behavior. The family then appeared before the judge and if the urine screen was positive for drugs or problematic behavior was indicated on the questionnaires, consequences could ensue, ranging from community service to detention. Positive behavior and drug free urine analysis resulted in rewards varying from a meal at a fast food restaurant to tickets to a sporting event. Youth attended Drug Court weekly, biweekly, or monthly, graduating from one level to the next depending on positive behaviors and clean drug screens.

The third condition consisted of Drug Court as outlined above, but also included MST (DC/MST) (n= 29). The fourth condition included Drug Court, MST, and Contingency Management (DC/MST/CM) (n=37). The Contingency Management component included the addition of a voucher system that rewarded drug free urine analysis, a functional analysis of drug-use behavior that served as the basis for self-management planning, and protocols for self-management.

In summary, results indicated that DC/MST youth were more likely to have graduated from Drug Court than the DC only youth; average number of days in out-of home placement did not differ significantly for youths across the treatment conditions, but percentages of youths placed differed significantly – youth in the FC condition had the lowest rate of placement (55%), and youths in the DC only condition had the highest rate (87%); no between-groups differences were

found in the average number of arrests for youths across the treatment conditions (1.3); data from the Form 90 (Miller, 1991) suggest that DC/MST/CM, and to a lesser extent DC/MST, were effective at decreasing substance use in contrast to FC; according to the Self-Report Delinquency Scale (Elliott, Ageton, Huizinga, Knowles, & Canter, 1983), youths in the FC condition reported an average of about 50 crimes during the past 90 days, whereas youths in the drug court conditions averaged fewer than 20; and DC/MST and DC/MST/CM conditions had significantly lower percentages of positive drug screens than did their DC only counterparts. Thus, MST appeared to have a differential effect on “graduation” and substance abuse outcomes but not on placement or arrests.

Fidelity protocol included 5 days of MST orientation training for MST therapists, weekly group supervision, 1 1/2 day quarterly booster trainings, and a 1-day Contingency Management training for CM therapists. CM therapists also had to review their implementation of CM with each youth. Caregiver report of therapist behavior was collected via a monthly telephone survey and a questionnaire assessed therapist behavior regarding utilization of MST and CM. Usual services did not follow a manualized approach.

MST: Fidelity

In addition to the emphasis on treatment adherence mentioned in the preceding studies, inquiries which specifically studied the fidelity of MST implementation have been conducted (Schoenwald, Sheidow, & Letourneau, 2004 (#12); Schoenwald, Halliday-Boykins, & Henggeler, 2003 (#13); Schoenwald, Letourneau, & Halliday-Boykins, 2005) (#14). Henggeler, Melton, Brondino, Scherer, and Hanley (1997) state that MST programs have a strong focus on program adherence and emphasize the importance of program fidelity in reference to successful outcomes. Although the protocol can vary, written fidelity measures are generally administered every six weeks to the clinician, caregiver, and adolescent to promote and monitor treatment adherence (Burns et al., 2000). Henggeler et al. (1997) cite the importance of treatment provider training and supervision as paramount to adherence to the principles of MST and, thus, quality care, improved child and family functioning, and decreased recidivism. Henggeler et al. (1997) outline three training and supervision guidelines that promote treatment fidelity.

1. Master's level therapists receive initial 5 day MST training.
2. Quarterly "booster" sessions to provide training in special topics such as marital therapy, treatment of parental depression, or early childhood intervention that contribute to the integrative nature of MST. These quarterly sessions also provide a setting for the discussion of particularly difficult cases.
3. Weekly group supervision that lasts for 1 ½ to 2 hours provided by MST on-site supervisor.

MST: Strengths and Weaknesses

Multisystemic therapy has several strengths. It has, by far, the most well-developed research base of any model of family therapy. As illustrated above, studies are rigorously designed and the model has been utilized with diverse populations. Additionally, fidelity protocols, while somewhat inconsistent in the manner in which they are implemented

(e.g. only audio-tape review and caregiver ratings of therapist adherence in #7; only weekly supervision in #9; review of session summaries and weekly supervision in #3; training, weekly supervision, and quarterly booster sessions in #2, and #1), are a component of MST research design. Other strengths include a commitment to community-based services for youth, with family and community involvement in the treatment.

There are several dynamics, however, which are clear weaknesses. Perhaps the most important of these is cost. Because of the strict fidelity component, groups wishing to utilize this model must pay a yearly licensing fee of \$6,000; complete the 5-day MST training at a cost of \$750 per therapist plus travel and expenses; pay \$1,500 per month for an MST consultant to provide weekly supervision; and provide for the MST consultant's travel and expenses to facilitate the quarterly booster sessions, amounting to approximately \$10,000 per year (Leschied, 2002). Leschied (2002) authored an unpublished study which took place in Ontario, Canada. The first year of this program cost \$70,000, with the second year costing \$115,000. While MST Services Inc. estimates the MST related administrative cost per case to be \$4,500, the average cost per case in the Ontario study was well over \$25,000 (Leschied, 2002). This additional cost was explained by low referral rates and that therapists were working below case load capacity.

The second component of MST which limits its utilization is the fact that therapists are expected to be available to their families 24 hours per day, seven days per week and that workers are ultimately held responsible for successful outcomes. Leschied (2002) states,

There is a heavy toll on therapists who must flex their day to the schedules of client families, be subject to continuous scrutiny of every facet of their work, share responsibility for a pager for 24/7 availability, and ultimately be held accountable for the success of intervention strategies. MST is an intensive intervention from the point-of-view of the families which receive it but it is an even more intensive intervention from the point-of view of the therapists who deliver it (p.124).

The author goes on to state, "Experience with MST in the United States demonstrates that a therapist can deliver MST for only one to three years on average before burning out" (Leschied, 2002, p.125).

Finally, there are limited studies conducted by persons outside the founding group which demonstrate MST delivers outcomes which are statistically significant better as compared to usual services. Littell, Popa, and Forsyth (2005) conducted a meta-analysis of MST studies and found "no significant differences between MST and usual services in restrictive out-of-home placements and arrests or convictions" (p.1). Heneggler, Schowenwald, Bourdin, and Swenson (2006) responded to this claim by pointing out the short-comings of the meta-analysis.

The paper reflects poor appreciation of: the conduct of community-based research with challenging clinical populations; the distinctions between efficacy, effectiveness, and transportability research — treating them all the same; the nuances of conducting meta-analyses; and the fact that not all outcome studies are asking the same conceptual questions (p. 448).

They then systematically address Dr. Littell's concerns about MST research design, including unclear randomization protocol, unyoked designs, unstandardized follow-up periods, and subjective definition of treatment completion. Finally, they discuss what they perceive as Dr. Little's over-reliance on Leschied's (2002) study, which was never peer reviewed, nor published.

Table I – Multisystemic Therapy

Citation	Description of Study	Pertinent Findings
(#1) Henggeler, S.W., Rodick, J.D., Bourdin, C.M., Hanson, C.L., Watson, S.M., & Urey, J.R. (1986). Multisystemic treatment of juvenile offenders: Effects on adolescent behavior and family interactions. <i>Developmental Psychology</i> , 22, 132-141.	<p>N= 80 juveniles – Quasi-experimental</p> <ul style="list-style-type: none"> -57 delinquent juveniles received MST -23 delinquent juveniles received outpatient therapy -44 non-delinquent juveniles served as developmental controls -No follow-up, no random assignment -Pre and post-treatment assessment included Behavior Problem Checklist (Quay, 1977), Eysenck Personality Inventory (Eysenck & Eysenck, 1963), Family Relationship Questionnaire, and Unrevealed Differences Questionnaire (Henggeler & Tavormina, 1980). -75% of the sample completed treatment. 	<p>-MST found to be “more effective than ‘usual community services’ in decreasing adolescent behavioral problems and improving family relations, especially communication and affect.”</p> <p>-Fidelity protocol included two hour supervisory sessions per week (with first author), often including the review of audio or video-taped family sessions</p>
(#2) Henggeler, S.W., Melton, G.B., & Smith, L.A. (1992). Family preservation using multisystemic therapy: An effective alternative to incarcerating serious juvenile offenders. <i>Journal of Consulting and Clinical Psychology</i> , 60 (6), 953-961.	<p>-84 juvenile offenders from Family and Neighborhood Services (FANS) randomly assigned to MST (n=41) or usual services (n=43).</p> <p>-Measures included the Brief Symptom Inventory (Derogatis, 1993); Revised Problem Behavior Checklist (Quay & Peterson, 1987); FACES III (Olson, Portner, & Lavee, 1985); the Missouri Peer Relations Inventory (Borduin et al., 1989); and the Child Behavior Checklist (Achenbach & Edelbrock, 1983), at pre and post treatment, with criminal record examined at post 59 weeks treatment.</p>	<p>-At 59 weeks post-referral, MST youth had fewer arrests and self-reported offenses, and spent an average of 10 fewer weeks incarcerated. MST condition also reported increased family cohesion and decreased youth aggression.</p> <p>-Fidelity protocol included 3 days of training from first author, 1 hour per week supervision with “experienced master’s level psychologist”, 1 hour per week phone consultation with first author, 1 day booster session every two months, and “periodic examination of and feedback on case notes”.</p>

	-77% of the sample completed treatment.	
(#3) Bourdin, C.M., Mann, B.J., Cone, L.T., Henggeler, S.W., Fucci, B.R., Blaske, D.M., & Williams, R.A. (1995). Multisystemic treatment of serious juvenile offenders: Long-term prevention of criminality and violence. <i>Journal of Consulting and Clinical Psychology</i> , 63, 569-578.	<p>N=176 – Juvenile offenders and their families randomly assigned to MST (n=92) vs. community –based individual therapy (IT) (n=84). IT was based upon psychodynamic, client-centered, and behavioral techniques that specifically focused on the adolescent, not upon the systems surrounding the adolescent.</p> <p>-Frequency and duration were not specified, but the mean hours of treatment for MST was 23.9, while for IT the mean was 28.6.</p> <p>- Measures included the Brief Symptom Inventory (Derogatis, 1993), Revised Problem Behavior Checklist (Quay & Peterson, 1987), FACES II (Olson, Portner, & Lavee, 1985), and the Missouri Peer Relations Inventory (Borduin et al., 1989), and criminal activity.</p> <p>-All measured collected pre and post-treatment, with criminal activity examined 4 years post-treatment.</p> <p>-79.5% of the sample completed treatment.</p>	<p>-At conclusion of treatment, MST families reported increased cohesion/adaptability and improved family supportiveness.</p> <p>-IT families reported decreased cohesion/adaptability and decreased family supportiveness.</p> <p>-No treatment effects noted for either group in reference to peer relations.</p> <p>-At 4-year follow-up, MST youth had a recidivism rate less than 1/3 of that for IT.</p> <p>-Fidelity measures included MST therapist summary for each session, IT therapists provided monthly summaries, MST therapists met with first author 3 hours per week, both groups completed checklist regarding which systems were addressed in therapy.</p>
(#4) Henggeler, S.W., Melton, G.B., Brondino, M.J., Scherer, D.G., & Hanley, J.H. (1997). Multisystemic therapy with violent and chronic juvenile offenders and their families: The role of treatment fidelity. <i>Journal of Consulting and Clinical Psychology</i> , 65, 821-833.	<p>N=155 – Chronic juvenile offenders and their families randomly assigned to MST (n=82) vs. usual juvenile justice services (n=73). Usual services included 6 months probation, monitoring of school attendance, referral to outpatient therapy, and A&D services.</p> <p>-Pre and post-test data collection included: Brief Symptom Inventory (Derogatis, 1993); Revised Problem Behavior Checklist (Quay & Peterson, 1987); FACES III (Olson, Portner, & Lavee, 1985); and the Missouri Peer Relations Inventory (Borduin et al., 1989). Criminal activity examined 1.7 years post treatment.</p> <p>-90% of the families completed treatment.</p> <p>-Purpose of this study was to determine whether</p>	<p>-Decreased psychiatric symptoms reported by MST youth at post-treatment.</p> <p>-Treatment effects were not observed in either group in reference to family relations or peer relations.</p> <p>-Fidelity measures included a 5 day orientation to MST, quarterly booster sessions, weekly supervision (not with MST expert), and weekly integrity checks via consultation with MST expert.</p> <p>- Outcomes were better in cases where MST treatment adherence was higher, thus highlighting the importance of treatment fidelity.</p>

	the effectiveness of MST could be maintained in CMH setting when MST experts did not provide significant clinical oversights – families completed MST Adherence Measure, to measure this facet of treatment.	
(#5) Henggeler, S.W., Pickrel, S.G., & Brondino, M.J. (1999). Multi-systemic treatment of substance abusing and dependent delinquents: Outcomes, treatment fidelity, and transportability. <i>Mental Health Services Research</i> , 1 (3), 171-184.	<ul style="list-style-type: none"> -118 juvenile offenders randomly assigned to MST or usual services (US) -US included outpatient, inpatient, residential SA services & MH services -Outcome measures included drug and alcohol use, criminal activity, and out-of-home placement. -MST services ranged from 12-187 hours for 3-6 months. -98% treatment retention. 	<ul style="list-style-type: none"> -Statistically significant decrease drug and alcohol use in MST group post-treatment, change was not maintained post 6 months; no statistically significant decrease in criminal activity -No statistically significant differences b/t groups post-treatment or 6 months -Fidelity assessment indicated adherence was low.
(#6) Brunk, M., Henggeler, S.W., & Whelan, J.P. (1987). A comparison of multisystemic therapy and parent training in the brief treatment of child abuse and neglect. <i>Journal of Consulting and Clinical Psychology</i> , 55, 311-318.	<ul style="list-style-type: none"> N=43 –Maltreating families were randomly assigned to MST (n=21) vs. clinic-based behavioral parent training (n=22). -Each group received 1 ½ hours of therapy per week for 8 weeks. -No follow-up -Pre-test and post-test measures included Symptom Checklist-90 (Derogatis, Lipman, & Covi, 1973), Behavior Problem Checklist (Quay & Peterson, 1987), Family Environment Scale (Moos & Moos, 1981), Family Inventory of Life Events and Changes (McCubbin, Patterson, & Wilson, 1985), and Treatment Outcome Questionnaire (TOQ) {developed for MST}. -All families completed pre-test and post-test questionnaires. 	<ul style="list-style-type: none"> - Families who received either treatment showed reduced adult psychiatric symptomatology, decreased overall stress, and a reduction in presenting problems. -Observational measures at post-treatment showed more effective parent control of child behavior and increased response to child's behavior among MST group. -Parents who received parent training reported a greater decrease in social problems. <p>Fidelity not mentioned.</p>
(#7) Schoenwald, S.K., Ward, D.M., Henggeler, S.W., & Rowland, M.D. (2000). Multisystemic therapy versus hospitalization for crisis stabilization of youth: Placement outcomes 4 months post-referral. <i>Mental</i>	<ul style="list-style-type: none"> N= 113 – Youth were randomly assigned to MST (n=57) vs. hospitalization (n=56) for psychiatric stabilization and analyzed 4 months post-approval for hospital services. -MST was altered for this study. Caseload size 	<ul style="list-style-type: none"> -In a significant proportion of MST youth, hospitalization was avoided and the reduction of hospital use was not offset by the use of other out-of-home services. -Youth in the hospitalization groups experienced

<p><i>Health Services Research</i>, 2, 3-12.</p> <p>Henggeler, et al. (1999) also reported on this study.</p>	<p>was decreased to three families per therapist, therapist supervision was increased, and crisis caseworkers were made available to the therapists.</p> <p>-100% sample retention rate.</p> <p>-Days of hosp, out-of home placement served as measurements</p>	<p>double the days in out-of-home placement in comparison to MST youth.</p> <p>-Fidelity protocol included analyzing randomly selected audio-tapes for therapist adherence by MST expert in involved in study.</p> <p>-Caregiver/youth ratings of therapist adherence were collected on 5 random occasions per family.</p>
<p>(#8) Henggeler, S.W., Rowland, M.D., Halliday-Boykins, C., Sheidow, A.J., Ward, D.M., Randall, J., Pickrel, S.G., Cunningham, P.B., & Edwards, J. (2003). One-year follow-up of multisystemic therapy as an alternative to the hospitalization of youths in psychiatric crisis. <i>Journal of the American Academy of Child and Adolescent Psychiatry</i>, 42, (5), 543-551.</p>	<p>Follow-up of above study.</p>	<p>-Differences found in above study generally dissipated by 12 to 16 months post recruitment. Authors hypothesized that MST needs to be restructured to specifically meet the needs of SED children.</p>
<p>(#9) Bourdin, C.M., Henggler, S.W., Blaske, D.M., & Stein, R. (1990). Multisystemic treatment of adolescent sex offenders. <i>International Journal of Offender Therapy and Comparative Criminology</i>, 35, 105-114.</p>	<p>-16 adolescent sex offenders and their families were randomly assigned to MST (n=8) vs. community-based out-patient counseling (n=8).</p> <p>-Sole measure was re-arrest, measured anywhere from 21-49 months post treatment.</p> <p>-62% completed treatment</p>	<p>-At 3 year follow-up, MST clients had 1/6 the rate of re-arrest for sexual crimes as to out-patient client.</p> <p>-Only 5 of each group completed the study.</p> <p>-Fidelity protocol included 2 ½ hour supervisory session per week with second author.</p>
<p>(#10) Rowland, M.D., Halliday-Boykins, C.A., Henggeler, S.W., & Cunningham, P.B. (2006). A randomized trial of Multisystemic Therapy with Hawaii's Felix class youths. <i>Journal of Emotional and Behavioral Disorders</i>, 13(1), 13-24.</p>	<p>-Original research design involved randomly assigning 200 SED youth and their families to either condition, but systemic issues and inconsistent application of MST principles led to project termination.</p> <p>-At termination 31 families (15 MST and 16</p>	<p>- At six month follow up, MST youth experienced greater decreases in CBCL externalizing and internalizing symptom scores, they experienced a significantly greater reduction in self-reported minor criminal activity, youth receiving only usual services averaged 60% more arrests per</p>

	<p>usual services) had completed 6 month follow-up data.</p> <p>-Measures included Child Behavior Checklist (Achenbach, 1991a), The Youth Risk Behavior Survey (Kolbe, Kann, & Collins, 1993), The Personal Experience Inventory (Winters & Henly, 1989), Self-Report Delinquency Scale (Elliott, Ageton, Huizinga, Knowles, & Canter, 1983), Family Adaptability and Cohesion Evaluation Scales-Third Edition (Olson, Portner, & Lavee, 1985), Social Support Questionnaire (Sarason, Sarason, Shearlin, & Pierce, 1987), and arrest records and data on days in out-of home placement were also examined.</p>	<p>month than participants assigned to MST, satisfaction with social support increased for caregivers in the MST group, but decreased for usual services caregivers.</p> <p>-No treatment effect on substance abuse or family adaptability and cohesion.</p> <p>-Treatment fidelity protocol consisted of 5 day orientation , on-site training, ongoing supervisor training, quarterly on-site booster sessions, and weekly telephone consultation with MST consultant; families completed bimonthly Therapist Adherence Measure; audio taped MST sessions were evaluated for fidelity; US had no validated adherence measures.</p>
<p>(#11)Henggeler, S.W., Halliday-Boykins, C.A., Cunningham, P. B., Randall, J., Shapiro, S.B., & Chapman, J.E. (2006). Juvenile drug court: Enhancing outcomes by integrating evidence-based treatments. <i>Journal of Consulting and Clinical Psychology</i>, 74(1), 42–54.</p>	<p>-161 families were randomly assigned to Drug Court (DC) (n=31), Family Court (FC) (n= 33), Drug Court and MST (DC/MST) (n= 29), Drug Court, MST, and Contingency Management (DC/MST/CM) (n= 37)</p> <p>-Measures included the Form 90 (Miller, 1991) and urine drug screen for alcohol and drug consumption, Self-Report Delinquency Scale (Elliott, Ageton, Huizinga, Knowles, & Canter, 1983), Child Behavior Checklist (Achenbach, 1991a), graduation from drug court, and days in out of home placement. Measures were collected at baseline, post 4 months, and post 12 months.</p>	<p>- MST youth were more likely to have graduated from Drug Court than the DC only youth;</p> <p>-average number of days in out-of home placement did not differ significantly for youths across the treatment conditions, but percentages of youths placed differed significantly – youth in the FC condition had the lowest rate of placement (55%), and youths in the DC condition had the highest rate (87%);</p> <p>-no between-groups differences were found in the average number of arrests for youths across the treatment conditions (1.3);</p> <p>-data from the Form 90 suggest that MST/CM,</p>

		<p>and to a lesser extent MST, combined with drug court were effective at decreasing substance use in contrast to FC;</p> <p>-according to the SRD, youths in the FC condition reported an average of about 50 crimes during the past 90 days, whereas youths in the drug court conditions averaged fewer than 20;</p> <p>- DC/MST and DC/MST/CM conditions had significantly lower percentages of positive drug screens than did their DC counterparts;</p> <p>-Fidelity protocol included 5 days of MST training for MST therapists, weekly group supervision, 11/2 day quarterly booster trainings, and a 1-day Contingency Management training for CM therapists. CM therapists also had to review their implementation of CM each youth. Caregiver report of therapist behavior was collected via a monthly telephone survey and a questionnaire assessed therapist behavior regarding utilization of MST and CM. Usual services did not follow a manualized approach.</p>
<p>(#12) Schoenwald, S.K., Sheidow, A.J., & Letourneau, E.J. (2004). Toward effective quality assurance in evidence-based practice: Links between expert consultation, therapist fidelity, and child outcomes. <i>Journal of Clinical and Adolescent Psychology</i>, 33 (1), 94-104.</p>	<p>-Two groups were compared to examine the effect of expert clinical consultation has on therapist adherence to MST and clients' behavior at posttreatment.</p> <p>-Pilot group (n=178 families, n=87 MST therapists, n=11 MST consultants)</p> <p>-Transportability group (n=274 families, n=162 MST therapists, n=10 MST consultants).</p> <p>-All therapists received 40 hours of MST training, weekly supervision with an expert MST clinical supervisor, weekly telephone consultation with a MST consultant and</p>	<p>-Findings indicated that alliance between the consultant and therapist does not improve client outcomes.</p> <p>-It was found that consultant competence has a positive relationship to therapist adherence and youth outcomes.</p> <p>-Analysis indicated that when consultant adherence is low then, therapist adherence is low, as are the measures on youths' behavior.</p>

	<p>additional training quarterly.</p> <ul style="list-style-type: none"> - The Consultant Adherence Measure (CAM), completed by therapists, was used to determine the consultant's adherence to MST consultant obligations. - The Therapist Adherence Measure (TAM), completed by the youth's caregiver, assessed therapist adherence to MST. - The Child Behavior Checklist, completed by the caregiver was used to measure each youth's behavior. 	
<p>(#13) Schoenwald, S.K., Halliday-Boykins, C.A., & Henggeler, S.W. (2003). Client-level predictors of adherence to MST in community service settings. <i>Family Process</i>, 42 (3), 345-359.</p>	<ul style="list-style-type: none"> -Effect of family structure and family characteristics on therapist adherence to MST and client outcomes was examined. -N= 233 antisocial youth at risk of out-of-home placement; 66 MST therapists - Referred youth were placed into one of three categories according to their history; status offense, criminal offense or substance abuse. Information concerning the youths' arrest, school and out-of-home placement history was gathered at intake. -Family demographics were gathered in areas of ethnicity, income, number of in-home caregivers and caregiver's education. -Therapist received 40 hours of MST training. They received one hour of weekly supervision by a trained MST supervisor. The therapists were also provided phone consultations with MST consultants and had additional training seminars held quarterly 	<ul style="list-style-type: none"> -Analysis indicated no association between the youth gender and number of in-home caregivers to therapist adherence -Greater therapist adherence was noted with families who did not have a secondary or above education and were economically disadvantaged. - A positive association was found between therapist adherence and caregiver when they were of the same ethnicity. - Results were not statistically significant concerning referral source or type of offense the youth had committed -Therapist adherence was lower when the youth's offense was more severe. - Youth's out-of-home placement and school truancy was found to be unrelated to therapist adherence. -Adherence was negatively associated with arrest history and school suspensions, thus indicating lower therapist adherence in more severe cases. - Fidelity measures consisted of 40 hours of MST training, 90 minutes of weekly MST supervision, telephone consultations with MST consultants, and quarterly trainings.

<p>(#14) Schoenwald, S.K., Letourneau, E.J., & Halliday-Boykins, C. (2005). Predicting therapist adherence to a transported family-based treatment for youth. <i>Journal of Clinical Child and Adolescent Psychology</i>, 34 (4), 658-670.</p>	<p>-Therapist adherence (N=405) was examined via analyzing therapist characteristics, family demographics, and severity of the youth's criminal offense.</p> <p>- The therapists were assessed according to their ethnicity, educational training, and personal perceptions of MST.</p> <p>-Data were collected on 1,711 families</p> <p>-Measures included the MST Therapist Adherence Measure (TAM) and Vanderbilt Functioning Index (VFI).</p>	<p>-The TAM indicated lower adherence when the therapist considered the 24 hours a day/7 days a week availability requirement associated with MST protocol to be problematic.</p> <p>-Therapist ethnicity, gender, age, marital status, education, salary and MST perceptions did not have a statically significant relation to adherence.</p> <p>-According to the TAM, adherence was greater when the therapist and client were of the same gender and ethnicity.</p> <p>-Adherence was also higher when the caregiver was African American and in cases involving caregivers without a high school degree.</p> <p>-A negative relationship was found between therapist adherence and higher scores on the VFI, indicating the more severe the youth behavior the lower therapist adherence.</p> <p>-Characteristics of the youth such as source of referral, out-of-home placements, jail time, and reason for referral were not associated to therapist adherence.</p> <p>-Fidelity measures consisted of a 5-day orientation to MST, additional training provided quarterly, and weekly supervision and phone consultation with MST supervisors.</p>
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Brief Strategic Family Therapy

(cross-referenced in Table II - the number in parentheses following the citation indicates its corresponding placement in Table II)

BSFT: History and Background

Brief Strategic Family Therapy (BSFT) began at the University of Miami School of Medicine in the early 1980s as a response to Hispanic adolescent drug abuse in Miami, Florida. The basic assumptions of BSFT are that the family is the bedrock of child development, and there must be service provider sensitivity and responsiveness to contextual factors (e.g. child in context of family and the family in context of larger society) (Szapocnik & Williams, 2000).

BSFT has evolved into a time-limited helping modality with interventions derived from both the structural and strategic interventions. Specifically, the family is seen as a system comprised of individuals and individual behaviors, and maladaptive family structure is characterized by repetitive family communications that elicit inadequate and/or unhealthy responses. Strategies implemented by the service provider are purposeful and premeditated. Service providers give attention to problematic familial exchanges and determine maladaptive interactions that, if altered, are most likely to lead to desired outcomes (Szapocnik & Williams, 2000). This modality can be implemented in a clinic setting or in the home. It is designed to provide 12-15 sessions over a three month time period. It specifically targets 8-17 year-olds who are displaying or at risk of behavioral problems, including Conduct Disorder, Oppositional Defiant Disorder, and Substance Abuse (Szapocnik & Williams, 2000).

BSFT: Research Base

This report includes four randomized trials and one single group trial implementing BSFT, and three studies which specifically address family engagement utilizing Strategic Structural Systems Engagement (SSSE), a method of engaging families developed by BSFT developers. BSFT has been utilized to improve family functioning, and address adolescent substance abuse, behavioral, and emotional problems.

Szapocznik et al. (1983) (#1) compared the effectiveness of conjoint family therapy (CFT) to one-person (usually the identified client) family therapy (OPFT), both of which are Brief Strategic Family Therapy interventions. The authors specifically wanted to test the need to have all family members present during therapy sessions to meet family and youth therapy goals. Five Hispanic therapists facilitated the intervention and did not receive any specialized instruction, but had an average of 8 years experience in BSFT. Thirty-seven Hispanic families were randomly assigned to the CFT intervention (n=18) or OPFT (n=19). The youth ranged in age from 12 to 20 years. All were Hispanic and 66% were male, with 34% being female. A maximum of 12 therapy sessions were provided. Measures included the Psychiatric Status Schedule (Spitzer, Endicott, Fleiss, & Cohen, 1970), the Behavior Problems Checklist (Quay, 1977) and Structural Family Tasks Ratings (developed by authors), and the Family Environment Scale (Moos, 1974), which were administered at intake, termination, and 6 to 12 months post

termination. Twenty-four of the 37 families completed all follow-up data at 12 months post termination.

T-tests found that OPFT clients received significantly more sessions than CFT families. The authors hypothesized that this occurred because it is inherently more difficult to retain entire families in the therapy process. However, all clinical scales indicated OPFT was found to be as effective as CFT at improving youth and family functioning. OPFT, at follow-up, was found to be slightly better than CFT when measuring prolonged family functioning.

Szapocznik et al. (1986) (#2) conducted a follow-up study to further support their finding in the previous study. They randomly assigned 35 Hispanic families to CFT (n=17) or to OPFT (n=18). The youth ranged in age from 12 to 20 years. All were Hispanic and 66% were male, with 34% being female (identical to previous study). The authors used the same measurement scales as in the previous study, with the maximum number of sessions increasing from 12 to 15. OPFT was again found to be as effective as CFT at achieving client and family goals, with OPFT being slightly more effective than CFT at sustaining improved family functioning.

Szapocznik et al. (1989) (#3) compared BSFT to Individual Psychodynamic Therapy, as well as Structured Recreation. Eighty-eight, 6-11 year old Hispanic boys with behavior and emotional difficulties were randomly assigned to one of the three groups. Treatment ranged from 12-24 hours of direct contact over a maximum six month period. Five measures were used to measure treatment outcomes. The first was a measure of attrition, which was defined as withdraw from therapy before the twelfth session. Others were the Revised Child Behavior Checklist (Achenbach & Edelbrock, 1983), the Revised Behavior Problem Checklist (Quay & Peterson, 1983), the Children's Depression Inventory (Kovacs, 1983), and the Psychodynamic Child Rating Scale (Szapocznik, Rio, Richardson, Alonso, & Murray, 1986). Data were collected at pre-treatment, post-treatment, and post one-year treatment.

Treatment fidelity was measured via the use of a 50 item checklist consisting of characteristics of both Individual Psychodynamic Therapy (IPT) and Brief Strategic Family Therapy (BSFT). Seventy-eight percent of IPT interventions were consistent with that model, while 61% of the BSFT interventions were consistent with that particular modality. Therapists in both treatment groups did not receive formal training for this study. Their previous work and training in their respective fields (approximately 12 years each) was considered to be sufficient.

There was significant attrition among the structured recreation control group (43%), but not among the BSFT or IPT groups. According to parent and child reports, both treatment conditions reduced emotional and behavioral problems equally. At one year follow-up, however, BSFT was found to be more effective in protecting family integrity. Specifically, BSFT was observed to have brought about significant improvement in family functioning through the "corrective experience" supplied by this model (Szapocznik & Williams, 2000, p.121). The authors purport that parents provided this "corrective experience" in BSFT, and addressed the child's symptoms and strengthened the family. Conversely in IPT, the therapist provided this "corrective experience". While this helped to ameliorate symptomatology initially, it neglected family functioning and increased risk of family problems.

Santisteban et al. (2003) (#4) compared BSFT to group therapy by randomly assigning 126 Hispanic adolescents and their families to one of the two conditions. They ranged in age from 12-18 years and 75% were male, with 25% being female. The BSFT group received between 4 to 20 weekly sessions, each lasting one hour. In the group condition, only the adolescent received therapy, which ranged from 6 to 16 sessions, with each session lasting approximately 90 minutes. Measures included Revised Problem Behavior Checklist (Quay & Peterson, 1987), the Addiction Severity Index (McLellan et al., 1985), the Family Environment Scale (Moos & Moos, 1984), and the Structural Family Systems Rating Scale (Szapocznik et al., 1989). Thirty percent of BSFT families and 37% of group therapy participants failed to complete treatment.

Treatment adherence was facilitated using a checklist with 17 therapist behaviors (six expected more in group work, six expected more in family work, and five in either condition). All sessions were video taped and randomly selected to be analyzed by five raters. No differences were found in the five undifferentiated techniques, while more family techniques were used in the BSFT condition, and more group techniques were utilized in the group condition. In summary, BSFT youth showed a significant decrease in conduct problems, peer-based delinquency, and self-reported drug use. The group condition showed no improvement in conduct problems, nor peer-based delinquency.

Szapocznik et al. (1988) (#5) examined the ability to engage and retain families in treatment by randomly assigning 108 Hispanic families to Strategic Structural Systems Engagement (SSSE) (n=56) or to engagement as usual (EAU) (n=52). The identified client in each family had either admitted to drug usage or was highly suspect in this regard. The identified clients ranged in age from 12 to 21 years, with 67% being male and 33% being female. The experimental condition specifically included techniques to address family resistance at the time of the initial help-seeking call, while the EAU did not. Measures included engagement and completion rates, as well as the Psychiatric Status Schedule (Spitzer, Endicott, Fleiss, & Cohen, 1970) and the Client Oriented Data Acquisition Process (developed by the National Institute on Drug Abuse).

Families in the SSSE condition were engaged (attended the intake session) at a rate of 93% and 77% of those completed treatment. Families in the EAU condition were engaged at a rate of 42%, while 25% of those completed treatment. According to the Client Oriented Data Acquisition Process, 80% of clients completing treatment were drug free at termination of services. The authors did not refer to particular drug usage statistics at termination for each condition.

Treatment adherence was monitored through a six level system which allowed only specific engagement techniques with each level. EAU was only allowed to utilize level zero and level one techniques, which only included minimal joining, encouraging the caller to involve the family, and scheduling the appointment. The SSSE condition was able to use levels zero through five, which included addressing client and family resistance to attending the intake session, problem solving with the caller around these barriers, therapist out-of-office visits to the family prior to the intake, and using extended family to assist in the addressing of barriers.

Santisteban et al. (1996) (#6) again evaluated the efficacy of Strategic Structural Systems Engagement (SSSE), incorporated in Engagement Family Therapy (EFT). One hundred ninety-three Hispanic families were randomly assigned to the EFT condition (n=52) or one of two engagement as usual services (family therapy n=67, group therapy n=74). The identified clients ranged in age from 12 to 18 years. Sixty-seven percent were male and 33% were female. The experimental condition consisted of SSSE, which is based on concepts of Brief Strategic Family Therapy and purports that a family's resistance to therapy will manifest itself during the intake process, and as such, can be more effectively addressed within that context. Both group of control families received usual intake services.

Treatment adherence was monitored through the same six level system which allowed only specific engagement techniques with each level. Again, only levels zero to one were utilized in the control condition, which allowed expressing polite concern, scheduling the intake appointment, making clear which family member must attend the intake session, and inquiring about the severity of the adolescent's problem. Levels zero to five were utilized with the BSFT group and involved techniques such as inquiring about the values and interests of different family members, asking if all family member are willing to attend the intake appointment, problem solving around attendance at the intake appointment, telephoning significant others for the purpose of gathering information, and visiting the home to facilitate attendance at intake appointment. The study found that 81% of the experimental group was successfully engaged (attending at least two sessions), while only 60% of the control families attended at least two sessions.

Coatsworth, Santisteban, McBride, and Szapocznik (2001) (#7) contrasted BSFT and a community control group in their respective effectiveness to engage and retain families in therapy, as well as their effect on client symptoms. One-hundred four African American and Hispanic families were randomly assigned to a BSFT group (n=53) or community condition (n=51). The identified clients ranged in age from 12 to 14 years, with 24% being African American and 76% being Hispanic. Seventy-five percent were male and 25% were female. No male/female ratio was noted. BSFT therapists used engagement and therapy techniques specific to that modality, while community condition intake workers and therapists utilized usual agency protocol. Adolescent clients presented with externalizing, internalizing, substance abuse, and/or severe academic problems. BSFT families received a mean of 8.7 hours of treatment, while community condition families received a mean of 7.0 hours of treatment. Measures utilized included the Revised Behavior Problem Checklist (Quay & Peterson, 1987), engagement rates, and retention rates. Data were collected at intake prior to randomization and at completion of treatment.

Eighty-one percent of BSFT families were engaged (attended first session) and 72% of those families completed treatment. Sixty-one percent of community condition families were engaged, while 42% of those completed treatment. The Revised Behavior Problem Checklist indicated that children in the BSFT condition scored significantly higher on the pre-test Conduct Disorder subscale than the community condition, were more successfully retained, and achieved comparable outcomes. This same measure also indicated similar outcomes for both conditions on the anxiety subscale. Treatment fidelity was maintained through weekly supervision for BSFT therapists. Community therapists received supervision as usual.

Santisteban et al. (1997) (#8) examined the ability of BSFT to prevent drug abuse among African-American and Hispanic youth between the ages of 12 and 14 years. Specifically, the intervention was designed to impact poor family functioning and behavior problems, two risk factors indicated in initial drug usage. One hundred twenty-two youth were assigned to a one-group pretest/posttest/follow-up design. They ranged in age from 12-14 years, with no male/female ratio noted. BSFT sessions consisted of 12-16 weekly family sessions, lasting 60-90 minutes. Attrition rate was not included.

Measures included the Revised Behavior Problem Checklist (Quay & Peterson, 1987), Family Assessment Measure (Skinner, Steinhauer, & Santa-Barbara, 1983), and the Adolescent Drug Abuse Diagnosis (Friedman & Utada, 1989). Therapist qualifications were briefly discussed, however, treatment fidelity was never specifically addressed. It was found that this intervention was significantly effective in decreasing youth behavior problems and poor family functioning, two risk factors cited as indicators for potential adolescent drug usage.

BSFT: Fidelity

While BSFT attends to treatment fidelity, the authors appear to adhere to various standards in different studies. One of the reasons for this may be that different authors utilize the terms “treatment fidelity”, “treatment adherence”, and “treatment competence” interchangeably. Treatment fidelity consists of two components: treatment adherence and treatment competence. Treatment adherence, according to Waltz, Addis, Koerner, and Jacobson (1993), is the “extent to which interventions are used” (p. 620). Treatment competence, on the other hand, is defined as the level of skill with which a specific modality is implemented (Waltz, Addis, Koerner, & Jacobson, 1993).

Szapocznik et al. (1983) (#1), Szapocznik et al. (1986) (#2), and Szapocznik et al. (1989) (#4) assumed treatment competence in that all the BSFT and Psychodynamic therapists had 8 to 10 years experience in their respective fields. In Szapocznik et al. (1988) (#3) and Santisteban et al. (1996) (#5), treatment adherence was monitored through a six level system which allowed only specific engagement techniques with each level. Adherence was also documented via a 50 item checklist consisting of IPT and BSFT characteristics. Seventy-eight percent of IPT interventions were consistent with that model, while 61% of the BSFT interventions were consistent with that particular modality. Santisteban et al. (1997) (#6) briefly discussed therapist characteristics (perhaps alluding to treatment competence), however, no component of treatment fidelity was clearly addressed. Coatsworth, Santisteban, McBride, and Szapocznik (2001) (#7) contended that treatment fidelity was maintained through weekly supervision for BSFT therapists, but no other measures were discussed. Finally, in Santisteban et al. (2003) (#8) treatment adherence was facilitated using a checklist with 17 therapist behaviors, specific to the respective conditions. All sessions were video taped and randomly selected to be analyzed by five raters and more family techniques were used in the BSFT condition, and more group techniques were utilized in the group condition.

BSFT: Strengths and Weaknesses

While not as large as Multisystemic Therapy, there is a research base which supports the use of BSFT. Another strength of this modality is its emphasis on engaging the family, and a well-conceptualized, empirically examined protocol to facilitate this process. It is also a manageable modality for therapists, as sessions can take place in the home or office, and families are expected to be seen once or twice per week. BSFT is also a more financially reasonable model for helping families, in that a one year training package costs about \$20,000, significantly less than MST. This includes a 3-day BSFT workshop, monthly phone supervision, and a follow-up 2-day skill development workshop (www.strengtheningfamilies.org). No example of total program cost was found for an external site, as was found for MST (Lescheid, 2002).

A significant weakness of BSFT is that it has been used almost exclusively with urban Latino and African American youths. Its applicability and efficacy with children of other ethnic and cultural backgrounds is yet to be understood, as well as its utilization with rural youths. Another weakness lies in what seems to be an inconsistent application of treatment fidelity measures ranging from assumed treatment competence (#1, #2, #3), to a very specific protocol regarding language used to engage families (#5 and #6), to a protocol more specific to treatment adherence (#3 and #4), to only BSFT supervision (#7). Finally, some might argue that BSFT is not strengths oriented, but rather focuses on family pathology (e.g. service providers give attention to problematic familial exchanges and determine maladaptive interactions that, if altered, are most likely to lead to desired outcomes (Szapocnik & Williams, 2000)).

Table II – Brief Strategic Family Therapy

Citation	Description of Study	Pertinent Findings
(#1) Szapocznik, J., Kurtines, W., Foote, F.H., Perez-Vidal, A., & Hervis, O. (1983). Conjoint versus one-person family therapy: Some evidence for the effectiveness of conducting family therapy through one person. <i>Journal of Consulting and Clinical Psychology</i> , 51(6), 889-899.	<ul style="list-style-type: none"> - 37 Hispanic families randomly assigned to the conjoint family therapy (CFT) condition (n=18) or the outpatient family therapy (OPFT) condition (n=19). -Measures included the Psychiatric Status Schedule(Spitzer, Endicott, Fleiss, & Cohen, 1970), Behavior Problem Checklist (Quay, 1977), Structural Family Talk Ratings (developed by authors), and the Family Environment Scale (Moos, 1974), -Measures administered at intake, termination, and 6 to 12 months post termination. -A maximum of 12 sessions were provided. -24 of the 37 families completed all follow-up data at 12 months post termination. 	<ul style="list-style-type: none"> - OPFT was found to be as effective as CFT at improving the youth's and family's functioning. -OPFT, at follow-up, was found to be slightly better than CFT when measuring prolonged family functioning. -No specific fidelity measures were utilized, however, therapists had an average of 8 years experience in BSFT.
(#2) Szapocznik, J., Kurtines, W., Foote, F.H., Perez-Vidal, A., & Hervis, O. (1986). Conjoint versus one-person family therapy: Further evidence for the effectiveness of conducting family therapy through one person. <i>Journal of Consulting and Clinical Psychology</i> , 54, 395-397.	<ul style="list-style-type: none"> -Purpose of study was to support findings of above study. - 35 Hispanic families randomly assigned CFT (n=17) or OPFT (n=18). -Utilized same measurement scales over same time frame as in above study. -Families were seen for a maximum of 15 sessions. 	<ul style="list-style-type: none"> - OPFT was found to be as effective as CFT at achieving the client and family goals. -OPFT again found to be slightly more effective than CFT at sustaining improved family functioning. -Again, no specific fidelity protocol, other than an average of 8 years of therapist experience with BSFT.
(#3) Szapocznik, J., Rio, A., Murray, E., Cohen, R., Scopetta, M., Rivas-Vazques, Hervis, O. Posada, V., & Kurtines, W. (1989). Structural family	<ul style="list-style-type: none"> -88, 6-11 year old Hispanic boys with behavior and emotional difficulties randomly assigned to one of the three groups, BSFT, Individual Child Psychodynamic 	<ul style="list-style-type: none"> -According to parent and child report, both treatment conditions reduced emotional and behavioral problems equally. -At one year follow-up, more of the BSFT

<p>versus psychodynamic child therapy for problematic Hispanic boys. <i>Journal of Consulting and Clinical Psychology</i>: 57(5), 571-578.</p>	<p>Therapy, or Structured Recreation.</p> <ul style="list-style-type: none"> -Measures included the Revised Child Behavior Checklist (Achenbach & Edelbrock, 1983), Revised Behavior Problem Checklist (Quay & Peterson, 1987), Children's Depression Inventory (Kovacs, 1983), Psychodynamic Child Rating Scale (Szapocznik, Rio, Richardson, Alonso, & Murray, 1986). -Data were collected pre-treatment, post-treatment, and one year post-treatment. -Treatment ranged from 12 to 24 hours of direct contact over 6 months. -Attrition was significant among the control group (43%), but not among the two other groups. 	<p>families were intact, leading the authors to posit that the parents provided the "corrective experience" in the BSFT group, thus strengthening the family as a whole.</p> <ul style="list-style-type: none"> -Fidelity consisted of the fact that all the BSFT and Psychodynamic therapists had a least 10 years experience in their respective field. -Fidelity was also documented via a 50 item checklist consisting of IPT and BSFT characteristics. Seventy-eight percent of IPT interventions were consistent with that model, while 61% of the BSFT interventions were consistent with that particular modality.
<p>(#4) Santisteban, D.A., Coatsworth, J.D., Perez-Vidal, A., Kurtines, W.M., Schwartx, S.J., LaPerriere, A., & Szapocznik, J. (2003). Efficacy of Brief Strategic Family Therapy in modifying Hispanic adolescent behavior problems and substance abuse. <i>Journal of Family Psychology</i>, 17(1), 121-133.</p>	<ul style="list-style-type: none"> -126 Hispanic adolescents randomly assigned them to the BSFT condition or group therapy. - The BSFT group received between 4 to 20 weekly sessions, each lasting one hour. -In group condition, the adolescent received therapy, which ranged from 6 to 16 sessions, with each session lasting approximately 90 minutes. -Measures included Revised Problem Behavior Checklist (Quay & Peterson, 1987), the Addiction Severity Index (McLellan et al., 1985), the Family Environment Scale (Moos & Moos, 1984), and the Structural Family Systems Rating Scale (Szapocznik et al., 1989). -30% of BSFT families and 37% of group 	<ul style="list-style-type: none"> -BSFT youth showed a significant decrease in conduct problems, peer-based delinquency, and self-reported drug use. -The group condition showed no improvement in conduct problems, nor peer-based delinquency - Treatment adherence was facilitated using a checklist with 17 therapist behaviors, specific to the respective conditions. All sessions were video taped and randomly selected to be analyzed by five raters. More family techniques were used in the BSFT condition, and more group techniques were utilized in the group condition.

	therapy participants failed to complete treatment.	
(#5) Szapocznik, J., Perez-Vidal, A., Brickman, A.L., Foote, F.H., Santisteban, D., Hervis, O., & Kurtines, W.M. (1988). Engaging adolescent drug abusers and their families in treatment: A strategic structural systems approach. <i>Journal of Consulting and Clinical Psychology</i> , 56, (4), 552-557.	-108 Hispanic families randomly assigned to strategic structural systems engagement (SSSE) (n=56) or to engagement as usual (EAU) (n=52). -Measures included engagement and completion rates, as well as the Psychiatric Status Schedule (Spitzer, Endicott, Fleiss, & Cohen, 1970) and the Client Oriented Data Acquisition Process (developed by the National Institute on Drug Abuse).	-Families in the SSSE condition were engaged at a rate of 93%, and 77% of those completed treatment. -Families in the EAU condition were engaged at a rate of 42%, and 25% of those completed treatment. -Treatment adherence was monitored through a 6 level system which allowed only specific engagement techniques with each level.
(#6) Santisteban, D.A., Szapocznik, J., Perez-Vidal, A., Kurtines, W., Murray, E.J., & LaPerriere, A. (1996). Efficacy of intervention for engaging youth and families into treatment and some variables that may contribute to differential effectiveness. <i>Journal of Family Psychology</i> , 10 (1), 35-44.	-193 Hispanic families randomly assigned to (1) Engagement Family Therapy (based on Strategic Structural Systems Engagement (SSSE), an approach based on BSFT which is intended to bring hard-to-reach families into service (n=52), or (2) engagement as usual protocol that consequently assigned families to family therapy (n=67) or group therapy (n=74).	- Results indicated 81% of the experimental group was successfully engaged (attending at least two sessions), while only 60% of the 2 control condition families attended at least 2 sessions. -Treatment adherence was monitored through a 6 level system which allowed only specific engagement techniques with each level.
(#7) Coatsworth, J.D., Santisteban, D.A., McBride, C.K., & Szapocznik, J. (2001). Brief strategic family therapy versus community control engagement, retention, and an exploration of the moderating role of adolescent symptom severity. <i>Family Process</i> , 40 (3), 313-333.	-104 African American and Hispanic families were randomly assigned to a BSFT group (n=53) or community condition (n=51). -Clients presented with externalizing, internalizing, substance abuse, and/or severe academic problems. -BSFT families received a mean of 8.7 hours of treatment, while community condition families received a mean of 7.0 hours of treatment. -Measures utilized included the Revised	-81% of the BSFT families were engaged (attended first session) and 72% of those families completed treatment. -61% of community condition families were engaged, while 42% of those completed treatment. -The RBPC indicated that children in the BSFT condition scored significantly higher on the pre-test Conduct Disorder subscale than the community condition, were more successfully retained, and achieved

	<p>Behavior Problem Checklist (RBPC) (Quay & Peterson, 1987), engagement rates, and retention rates.</p> <p>-Data were collected at intake prior to randomization and at completion of treatment.</p>	<p>comparable outcomes.</p> <ul style="list-style-type: none"> - The RBPC indicated similar outcomes for both conditions on the anxiety subscale. -Treatment fidelity was maintained through weekly supervision for BSFT therapists. Community therapists received supervision as usual.
<p>(#8) Santisteban, D.A., Coatsworth, J.D., Perez-Vidal, A., Jean-Gilles, M., & Szapocznik, J. (1997). Brief structural/strategic family therapy with African-American and Hispanic high-risk youth. <i>Journal of Community Psychology</i>, 25 (5), 453-471.</p>	<ul style="list-style-type: none"> -122 youth assigned to a one-group pretest/posttest/follow-up design. -BSFT sessions consisted of 12-16 weekly family sessions, lasting 60-90 minutes - Examined the ability of BSFT to prevent drug abuse among African-American and Hispanic youth between the ages of 12 and 14 years. -BSFT intervention was designed to impact poor family functioning and behavior problems, two risk factors indicated in initial drug usage. -Measures included the Revised Behavior Problem Checklist (Quay & Peterson, 1987), Family Assessment Measure (Skinner, Steinhauer, & Santa-Barbara, 1983), and the Adolescent Drug Abuse Diagnosis (Friedman & Utada, 1989). -Attrition rate was not noted. 	<ul style="list-style-type: none"> -BSFT was significantly effective in decreasing youth behavior problems and poor family functioning, two risk factors cited as indicators for potential adolescent drug usage. -Therapist characteristics were briefly discussed, however, treatment fidelity was never addressed.

Multidimensional Family Therapy

(cross-referenced in Table III - the number in parentheses following the citation indicates its corresponding placement in Table III)

MDFT: History and Background

Multidimensional Family Therapy (MDFT) has developed over the past 20 years as a family-based approach to assist adolescents with drug and/or behavior problems. Multidimensional Family Prevention (MDFP) is based on MDFT principles and is designed to prevent substance abuse in young adolescents. Along with significantly reducing or eliminating the youth's substance abuse, MDFT aims to improve overall family functioning. Objectives for the youth include developing healthy peer relations, positive identity formation, developmentally appropriate balance between autonomy and emotional connection with parents, and development of attachment to pro-social institutions. Goals for the parents include improved relationship and communication with their child, enhancing parental commitment to the child and their problems, and increased knowledge about parenting practices (Liddle et al., 2001). Theory based?

MDFT has been developed in different forms, ranging from a very intensive intervention which can take place for up to 6 months and include 25 sessions, to a less intensive protocol which entails 12 sessions over 3 months. The variation in intensity is determined by needs of the target population. Regardless of session frequency and duration, work can take place in the home, community, or clinic setting. Five assessment and intervention modules structure the approach: 1) Interventions with the Adolescent; 2) Interventions with the Parents; 3) Interactions to Change the Parent-Adolescent Interaction; 4) Interventions with Other Family Members; and 5) Interventions with Systems External to the Family (www.strengtheningfamilies.org). Finally, the development of a therapeutic alliance between the adolescent and service provider that is distinct from the alliance developed between the parent(s) and service provider is a “cardinal feature” of MDFT (Hogue et al., 2005, p. 197).

MDFT: Research Base

This report addresses four randomized studies of MDFT and one randomized study of MDFP. Two studies are included which address fidelity of MDFT/MDFP implementation. Treatment fidelity protocol is robust and consistent in all studies.

Hogue, Liddle, Becker, and Johnson-Leckrone (2002) (#1) randomly assigned 124 inner-city youth and their families to an MDFP condition (n=61) or a youth enrichment program (n=63). All youth were considered to be at risk of substance abuse/behavioral problems. Ninety-seven percent of the 124 participants were African-American. They ranged in age from 11 to 14 years and 44% were male, with 66% being female. The youth enrichment program provided tutoring services, sports and club activities, and vocational counseling to youths 2 hours per day after school. MDFP families received a mean of 13.5 sessions over 16.6 weeks.

Measures utilized included frequency of substance use, Diagnostic Interview Schedule for Children 2nd Edition (Jensen et al., 1995), Child Behavior Checklist and Child Behavior

Checklist/Youth Self-Report (Achenbach, 1991a; 1991b), Self-Perception Profile for Adolescents (Harter, 1988), family cohesion and parental monitoring using measures from Chicago Youth Development Study (Gorman-Smith et al., 1996), school involvement, pro-social peer association, and anti-social peer association. Data were collected at time of study recruitment and 4-months post recruitment. Attrition was small, with only 6% of MDFP families failing to complete the program, and only 3% of the control group failing to complete needed paperwork.

MDFP youth and families showed immediate improvement in self-concept, school bonding, family cohesion and decrease in report of anti-social behavior by friends, while the control group experienced a decrease in family cohesion and school bonding, and an increase in antisocial peer interactions. Interestingly, the overall grade point average for both groups dropped from a C+ to a C. The authors did not comment on their understanding of the decline of this measure. Over time, there was no difference between groups on the Child Behavior Checklist, Child Behavior Checklist/Youth Self-Report, or frequency of drug usage.

In reference to treatment adherence, counselors had 50 didactic hours in MDFP training, 30 hours reviewing video tape of family-based counseling with an MDFP supervisor, two pilot cases were supervised live or via video tape, and each participant had 3 hours of weekly supervision with third author. Sessions were videotaped and coded, using the *Therapist Behavior Rating Scale – 2nd Version* (Hogue, Johnson-Leckrone, Hahn, & Liddle, 1997). Counselors were rated according to the frequency and thoroughness with which they utilized MDFP throughout the sessions. It was found that counselors specifically emphasized family-based techniques. This adherence component is reported again in MDFT reference #7, where this MDFP adherence measurement is compared with treatment adherence to MDFT and Cognitive-Behavioral Therapy for substance abusing youth.

Liddle et al. (2001) (#2) randomly assigned 152 marijuana and alcohol abusing adolescents to an MDFT condition (n=47), adolescent group therapy (AGT) (n= 53), or multifamily educational intervention (MEI) (n=52). Eighty percent were male and 20% were female. They had a mean age of 15.9 years. Services were delivered weekly for 16 weeks on an outpatient basis. Data were collected at intake, termination of services, 6-months post termination, and 12-months post termination. Measures included adolescent and parent report of drug usage, urinalysis, the Devereux Adolescent Behavior Rating Scale (Spivack, Haimes, & Spotts, 1967), school performance, and the Beavers Interactional Competence Scale (Beavers, Hampson, & Hulgus, 1991).

The MDFT condition consisted of 16 weekly sessions in an office-based setting. Engagement and engendering commitment to treatment was the focus of the first month, as well as establishing alliances with both the parents and the child(ren) (Phase 1). The middle phase of MDFT lasted approximately one month and involved improving problem solving skills, communication skills, and therapists coached parents in new ways to positively interact with their teenager. The final phase consisted of generalization of skills to the “real world”.

MEI is based on principles from family systems and social support theory. Groups of three to four families met for 16 weeks, with each session lasting 90 minutes. Only parents attended

some meetings, while the entire family attended others, with a trained therapist facilitating all sessions. The format of these sessions included didactic presentations which included handouts, skill-building exercises, problem solving, and homework. Stress reduction, enforcement of rules, limit setting, and improving family communication were also topics of discussion.

AGT consisted of two individual family sessions to enlist cooperation, discuss treatment goals, and explain the treatment process to the family. This phase was followed by four adolescent group sessions, involving six to eight adolescents and two therapists for 90 minutes. Phase 2 included communication skill building, as well as acknowledgment of strengths and accomplishments. Phase 3 consisted of structured activities and homework to develop social skills, drug refusal skills, anger management skills, and pro-social interests and behaviors. Phase 4 focused on maintenance and relapse prevention.

There was a 30% attrition rate from the MDFT condition, 35% from MEI, and 47% from the AGT condition. At termination, 42% of MDFT participants, 25% of AGT adolescents, and 32% of MEI participants reported a clinically significant reduction in drug usage (defined as drug usage at termination was less than level of drug usage at intake). At the one-year follow-up, 45% of MDFT youth, 32% of AGT adolescents, and 26% of MEI participants reported their drug usage remained below the level of usage at intake. At intake, 25 % of the participants in the MDFT group, 43% of the AGT group, and 36% of MEI youth had a grade point average of 2.0 or above. One year after treatment, those percentages improved to 76%, 60%, and 40%, respectively.

Treatment adherence included the use of therapist training manuals for each particular modality, expert supervisors for each team of therapists, and video tape review. Each therapist averaged one hour of supervision per week. No rating scales were used to document adherence.

Liddle, Rowe, Dakof, Ungaro, and Henderson (2004) (#4) randomly assigned 80 adolescents referred for substance abuse and behavior problems to MDFT (n=39) or peer-group therapy (n=41). The peer-group therapy was a manual guided intervention based on social learning principles and cognitive behavioral therapy. The participants ranged in age from 11 to 15 years, with 58 males and 22 females included. Forty-two percent were Hispanic, 38% African American, 11% Haitian or Jamaican, 3% non-Hispanic white, and 4% other. Therapy provided to both groups was home and clinic-based, twice per week, for 12 to 16 weeks, with sessions lasting 90 minutes. Measures included Child Behavior Checklist Youth Self-Report (Achenbach, 1991b), Family Environment Scale (Moos & Moos, 1986), National Youth Survey Peer Delinquency Scale (Elliot, Huizinga, & Ageton, 1985), Timeline Follow-Back Method (Sobell & Sobell, 1992), and the National Youth Survey (Huizinga & Elliot, 1983). Data were collected at intake, 6 weeks post-intake, and at a treatment discharge. Only 3% of MDFT families failed to complete treatment, versus 28% of the group therapy condition.

MDFT youth reported a more rapid decrease in self-reported externalizing behaviors, with both conditions producing decreased internalizing symptoms. MDFT families generally improved at each assessment in the area of family cohesion, while families in the peer-group condition reported less cohesion at each successive data collection point. Neither condition was associated with change in family conflict. From intake to discharge, MDFT youth reported a

68% decrease in association with delinquent peers, while the control group reported a 54% decrease. During this same time frame, MDFT youth reported a 56% decrease in cannabis use, while the peer-group condition reported a 46% decrease.

Treatment adherence measures included 30 hours of initial training for therapists and ongoing supervision. Supervisors reviewed all cases weekly, as well as technique and content checklists completed by therapists at the end of each session. Group sessions were randomly attended by research staff and rated for adherence using an observational checklist. Videotapes of MDFT sessions were reviewed, and supervisors subsequently completed the Therapist Behavior Rating Scale (Hogue et al., 1998), to document adherence.

Hogue, Dauber, Liddle, and Samuolis (2004) (#3) randomly assigned 51 substance-abusing adolescents to MDFT (n=25) or individual cognitive-behavioral therapy (n=26). Sixty-five percent were African American, 25% were Caucasian, and 10% were Hispanic. The mean age was 15.2 year and 67 % were male, with 33% being female. The hypothesis guiding this study was that greater use of adolescent-focused intervention techniques would predict improvement in CBT, and greater use of family-focused techniques would predict improvement in MDFT. Both conditions took place over 16-24 weeks, on a weekly, outpatient basis. Across both conditions, 41% of families failed to complete treatment.

Measures included the Therapist Behavior Rating Scale (Hogue et al., 1998), used to code 12 therapist techniques and 5 session focus items; Timeline Follow-Back Method (Sobell & Sobell, 1992); Child Behavior Checklist (Achenbach, 1991a). After an exhaustive review of the paper, it was unclear at what points in time the Timeline Follow-Back Method and Child Behavior Checklist were collected. The Therapist Behavior Rating Scale was used by trained raters that were naïve to the study goals and the fact that two different therapies were being utilized. One randomly selected video-taped session from each case was selected for coding.

Analysis indicated that MDFT therapists had a higher score on the Family Focus scale of the two Therapist Behavior Rating Scales, and CBT therapists had a higher score on the Adolescent Focus Scale. It was also found that family focus, but not adolescent focus, predicted post-treatment improvements in externalizing and internalizing symptoms, as well as drug use. In both conditions, it was found that interventions which addressed family themes, but not those that required family member participation, predicted treatment gains. Treatment adherence included therapists in both conditions completing 6 months of training, receiving weekly individual supervision from model developers, and attending monthly group meetings.

MDFT: Fidelity

The above studies demonstrate a high value placed upon treatment adherence and competent service delivery. Rigorous therapist training, pilot sessions, review of video-taped sessions, weekly expert supervision, and group supervision are all relatively consistent components of MDFT and MDPF protocol. In addition to these protocols, inquiries specific to adherence have also been conducted.

Hogue, Liddle, Singer, and Leckrone (2005) (#5) examined the fidelity of implementation of MDFP, MDFT, and cognitive behavioral therapy (CBT). It is important to note that only the level of treatment fidelity, itself, was measured and fidelity was not linked to client outcomes. The “prevention” sample, as the authors referred to it, was created by randomly selecting 50 adolescents and families from a study comparing MDFP to a no-intervention control (Hogue, Liddle, Becker, & Johnson-Leckrone, 2002). The mean age of this sample was 12.5, 48% were male/52% were female, and 98% of them identified themselves as African American. The “treatment” sample, as the authors termed it, was a randomly selected sample of 43 participants drawn from a trial comparing CBT and MDFT (Liddle & Hogue, 2001). Twenty-eight families came from the MDFT condition and 15 from the individual CBT condition. This sample had a mean age of 14.7 years, 72% were male/28% were female, and 72% were African American, 14% were Caucasian, with 14% being Hispanic.

Randomly selected videotapes of 109 MDFP sessions, 57 MDFT sessions, and 31 CBT sessions were rated by students trained in evaluation. The only measure utilized was the Therapist Behavior Rating Scale (Hogue et al., 1998), used for coding by trained students. Raters were unaware of the purpose of the study and did not have training in any of the models. Analysis indicated that MDFP counselors spent significantly more time with parents and family, than did CBT therapists. MDFP service providers demonstrated adherence to intervention parameters, specifically use of MDFT modules. Both MDFP and MDFT did not focus on behavioral adolescent intervention (as CBT did), but focused on interactional interventions among family members.

Treatment adherence was maintained via counselor training in their respective modality (authors did not indicate number of hours or days of training), counselor review of video-taped sessions, completion of 2 pilot cases, 3 hours of supervision per week, video-tape review of active cases, and live supervision.

Hogue, Liddle, Rowe, Turner, Dakof, and LaPann (1998) examined the level of treatment adherence in the deliver of MDFT and Cognitive Behavioral Therapy (CBT). Thirty-six drug abusing adolescents were randomly assigned to MDFT (n=19) or CBT (n=17). The sample was 72% male/28% female, 61% African American, 25% Caucasian, 14% Hispanic, and the mean age was 15.2 years. Again, as in the above study, treatment adherence not linked to outcomes. Ninety video-taped sessions were randomly selected for coding. Coding was facilitated utilizing the Therapist Behavior Rating Scale (Hogue et al., 1998). Raters were undergraduate students who had no prior experience in coding or in the treatment modalities.

Analysis concluded that MDFT therapists stressed interactional and affective dynamics, while CBT therapists focused on drug-focused and behavioral components. The authors also concluded that a high level of both treatment adherence and differentiation was obtained by each modality. Treatment adherence was maintained via 32 hours of therapist training specific to model prior to beginning project, completion of two pilot sessions, model developers served as supervisors, sessions were video-taped and reviewed, and bimonthly group meetings.

MDFT: Strengths and Weaknesses

While the research base for MDFT and MDFP is not as voluminous as MST, it is relatively comparable to BSFT and more fully developed than that of FFT. The research designs utilized are quite rigorous, and MDFT/MDFP treatment adherence and competence measures are perhaps the most clearly conceptualized and consistently implemented of any of the four models examined in this inquiry. In addition to several randomized trials, the developers of MDFT have also done work around resolving therapeutic impasse between parents and adolescents (Diamond & Liddle, 1996) and alliance building with adolescents in family therapy (Diamond, Hogue, Liddle, & Dakof, 1999).

In reference to weaknesses, while it is admirable that the authors have done a significant amount of work specifically addressing the level of treatment adherence with which MDFP and MDFT are implemented (#5 and #6), those studies, which represent one-quarter of their peer-reviewed work, do not link adherence to outcomes. The authors acknowledge this as a limitation of these studies, and state that “successful implementation does not imply, or guarantee, positive outcome” (Hogue et al., 1998).

While not necessarily a weakness, information about the cost of implementing MDFT could not be located. The site utilized to find information about the cost of MST and BSFT stated “Since we (developers of MDFT) individualize the training package to fit a particular site’s needs, it is best to contact the developer for more information (about cost of utilization and implementation).” Because of this lack of information, a comparison to other models could not be made. The Office of Juvenile Justice and Delinquency Prevention website (www.ojjdp.gov) was also searched, with no information found. Another weakness is that this model has only been utilized with youth who experience substance abuse problems, not with juvenile offenders, youth with SED, or any other populations

Table III – Multidimensional Family Therapy

Citation	Description of Study	Pertinent Findings
(#1) Hogue, A., Liddle, H.A., Becker, D., & Johnson-Leckrone, J. (2002). Family-based prevention counseling for high-risk young adolescents: Immediate outcomes. <i>Journal of Community Psychology</i> , 20 (1), 1-22	<p>-124 inner-city youth and their families randomly assigned to MDFP (n=61) or youth enrichment program (n=63).</p> <p>-MDFP families received a mean of 13.5 sessions over 16.6 weeks.</p> <p>- Measures – Frequency of substance use, Diagnostic Interview Schedule for Children 2 (Jensen et al., 1995), CBCL/YSR (Achenbach, 1991a; 1991b), Self-Perception Profile for Adolescents (Harter, 1988), family cohesion and parental monitoring using measures from Chicago Youth Development Study(Gorman-Smith et al., 1996), school involvement, prosocial peer association, and anti-social peer association.</p> <p>-Data were collected at time of study recruitment and 4-months post recruitment.</p> <p>-Only 6% of MDFP families failed to complete the program, and only 3% of the control group failed to complete needed paperwork.</p>	<p>-MDFP youth/families showed immediate improvement in self-concept, school bonding, family cohesion and decrease in report of anti-social behavior by friends.</p> <p>-Control group experienced a decrease in family cohesion and school bonding, and an increase in antisocial peer interactions.</p> <p>-Overall grade point average for both groups dropped from a C+ to a C.</p> <p>-There were no differences between group in change over time on any drug or behavioral symptom (CBCL, YSR/CBCL) measures.</p> <p>-Treatment Adherence - Counselors had 50 didactic hours in MDFP training, 30 hours reviewing video tape of family-based counseling w/ MDFP supervisor, 2 pilot cases supervised live or via video tape, 3 hours of weekly supervision with third author. Sessions were videotaped, coded, and analyzed. It was found that counselors emphasized family-based techniques. (This adherence component is reported again in MDFT reference #7.)</p>
(#2) Liddle, H.A., Dakof, G.A., Parker, K., Diamond, G.S., Barrett, K., & Tejeda, M. (2001). Multidimensional family therapy for adolescent drug abuse: Results of a randomized clinical trial. <i>American Journal of Drug and Alcohol Abuse</i> , 27 (4), 651-688.	<p>-152 marijuana and alcohol abusing adolescents randomly assigned to MDFT (n=52), adolescent group therapy (AGT) (n=53), or multifamily educational intervention (MEI) (n=53).</p> <p>-Services were delivered once a week on an outpatient basis for 16 weeks.</p> <p>-Data were collected at intake, termination of services, 6-months post termination, and 12-</p>	<p>- At termination, 42% of MDFT participants, 25% of AGT adolescents, and 32% of MEI participants reported a clinically significant reduction in drug usage (defined as drug usage at termination was less level of drug usage at intake).</p> <p>-At the one-year follow-up, 45% of MDFT youth, 32% of AGT adolescents, and 26% of MEI participants reported their drug usage remained below the level of usage at intake.</p> <p>- At intake, 25 % of the participants in the MDFT</p>

	<p>months post termination.</p> <ul style="list-style-type: none"> -Measures included adolescent and parent report of drug usage, urinalysis, the Devereux Adolescent Behavior Rating Scale (Spivack, Haimes, & Spotts, 1967), school performance, and the Beavers Interactional Competence Scale (Beavers, Hampson, & Hulgus, 1991). -30% of families dropped out of the MDFT condition, 35% from the MEI condition, and 47% of adolescents failed to complete AGT. 	<p>group, 43% of the AGT group, and 36% of MEI youth had a grade point average of 2.0 or above. One year after treatment, those percentages improved to 76%, 60%, and 40%, respectively</p> <ul style="list-style-type: none"> - Treatment adherence protocol included training manuals for each modality, expert supervisors for each modality, and video tape review. Each therapist averaged one hour of supervision per week. No rating scales were used to document adherence.
<p>(#3) Liddle, H.A., Rowe, C.L., Dakof, G.A., Ungaro, R.A., & Henderson, C.E. (2004). Early intervention for adolescent substance abuse: Pretreatment to posttreatment outcomes of a randomized clinical trial comparing multidimensional family therapy and peer group treatment. <i>Journal of Psychoactive Drugs</i>, 36 (1), 49-63.</p>	<ul style="list-style-type: none"> -80 adolescents referred for substance abuse and behavior problems randomly assigned to MDFT (n=39) or peer-group therapy (n=41). -Therapy provided to both groups was home and clinic-based, twice per week, for 12 to 16 weeks. Sessions lasted 90 minutes. -Measures included Child Behavior Checklist Youth Self-Report (Achenbach, 1991b), Family Environment Scale (Moos & Moos, 1984), National Youth Survey Peer Delinquency Scale (Elliot, Huizinga, & Ageton, 1985), Timeline Follow-Back Method (Sobell & Sobell, 1992), and the National Youth Survey (Huizinga & Elliot, 1983). -Data were collected at intake, 6 weeks post-intake, and at a treatment discharge. -Only 3% of MDFT families failed to complete treatment, versus 28% of the group therapy condition. 	<ul style="list-style-type: none"> - MDFT youth reported a more rapid decrease in self-reported externalizing behaviors. -MDFT families generally improved at each assessment in the area of family cohesion, while families in the peer-group condition reported less cohesion at each successive data collection point. -From intake to discharge, MDFT youth reported a 68% decrease in association with delinquent peers, while the control group reported a 54% decrease. -From intake to discharge, FT youth reported a 56% decrease in cannabis use, while the peer-group condition reported a 46% decrease. -Treatment adherence protocol included 30 hours of initial training for therapists and ongoing supervision. Supervisors reviewed all cases weekly, as well as technique and content checklists completed by therapists at the end of each session. Group sessions were attended by research staff and rated using an observational checklist. Videotapes of MDFT sessions were reviewed and supervisors completed the Therapist Behavior Rating Scale (Hogue et al., 1998).
<p>(#4) Hogue, A., Dauber, S., Liddle, H.A., & Samuolis, J. (2004). Linking session focus to treatment outcome in</p>	<ul style="list-style-type: none"> -51 substance-abusing adolescents receiving outpatient psychotherapy were randomly assigned to MDFT (n=25) or individual cognitive- 	<ul style="list-style-type: none"> -MDFT therapists had a higher score on the Family Focus scale of the Therapist Behavior Rating Scale, and CBT therapists had a higher score on

<p>evidence-based treatments for adolescent substance abuse.</p> <p><i>Psychotherapy: Theory, Research, Practice, and Training</i>, 4, (2), 83-96.</p>	<p>behavioral therapy (n=26).</p> <ul style="list-style-type: none"> -The hypothesis guiding this study was that greater use of adolescent-focused intervention techniques would predict improvement in CBT, and greater use of family-focused techniques would predict improvement in MDFT. -Both conditions took place over 16-24 weeks, on a weekly, outpatient basis. -Measures included the Therapist Behavior Rating Scale (Hogue et al., 1998), used to code 12 therapist techniques and 5 session focus items; Timeline Follow-Back Method (Sobell & Sobell, 1992); Child Behavior Checklist (Achenbach, 1991a). -Unclear when Timeline Follow-Back Method and Child Behavior Checklist were collected. -Across both conditions, 41% of families failed to complete treatment. 	<p>the Adolescent Focus Scale.</p> <ul style="list-style-type: none"> -Analysis indicated that family focus, but not adolescent focus, predicted post-treatment improvements in externalizing and internalizing symptoms, as well as drug use. -In both conditions, it was found that interventions that addressed family themes, but not those that required family member participation, predicted treatment gains. -Treatment adherence included therapists in both conditions completing 6 months of training, receiving weekly individual supervision from model developers, and attending monthly group meetings.
<p>(#5) Hogue, A., Liddle, H.A., Singer, A., & Leckrone, J. (2005). Intervention fidelity in family-based prevention counseling for adolescent problem behaviors. <i>Journal of Community Psychology</i>, 33 (2), 191-211.</p>	<ul style="list-style-type: none"> -Examined fidelity of implementation of MDFT, MDFT, and Cognitive Behavioral Therapy (CBT). Note: fidelity was NOT linked to outcomes -Randomly selected MDFT sample (n=50), MDFT (n=28), and CBT sample (n=38) -Goal was to determine if MDFT and MDFT counselors utilized signature family-based intervention techniques prescribed by the model & avoided CBT techniques that were proscribed. -Randomly selected videotapes of 109 MDFT sessions, 57 MDFT sessions, & 31 CBT sessions were rated by students trained in evaluation. -Only measure was Therapist Behavior Rating Scale (Hogue et al., 1998), used for coding by students. 	<ul style="list-style-type: none"> -MDFT and MDFT counselors spent significantly more time with parents and family. -MDFT demonstrated adherence to intervention parameters, specifically use of MDFT modules. -Both MDFT & MDFT did not focus on behavioral adolescent intervention (as CBT did), but focused on interactional and facilitative interventions among family members. -Treatment adherence was maintained via counselor training in their respective modality (authors did not indicate number of hours or days of training), counselor review of video-taped sessions, completion of two pilot cases, 3 hours of supervision per week, video-tape review of active cases, and live supervision.
<p>(#6) Hogue, A., Liddle, H.A., Rowe, C., Turner, R., Dakof, G.A., & LaPann, K.</p>	<p>-Examined fidelity of implementation of MDFT and Cognitive Behavioral Therapy (CBT)</p>	<p>-Analysis concluded that MDFT therapists stressed interactional and affective dynamics,</p>

<p>(1998). Treatment adherence and differentiation in individual versus family therapy for adolescent substance abuse. <i>Journal of Counseling Psychology</i>, 45, (1), 104-114.</p>	<ul style="list-style-type: none"> -36 drug abusing adolescents were randomly assigned to MDFT (n=19) or CBT (n=17) -Treatment adherence not linked to outcomes. -Raters were undergraduate students who had no prior experience in coding or in the treatment modalities. - Only measure was Therapist Behavior Rating Scale (Hogue et al., 1998), used for coding by students. -90 video-taped sessions were randomly selected for coding. 	<p>while CBT focused on drug-focused and behavioral components.</p> <ul style="list-style-type: none"> -The authors also concluded that a high level of both treatment adherence and differentiation was obtained by each modality. -Treatment adherence was maintained via 32 hours of therapist training specific to model prior to beginning project, completion of two pilot sessions, model developers served as supervisors, sessions were video-taped and reviewed, and bimonthly group meetings.
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Functional Family Therapy

(cross-referenced in Table IV - the number in parentheses following the citation indicates its corresponding placement in Table IV)

FFT: History and Background

Functional Family Therapy (FFT) was founded at the University of Utah in the late 1960s. It has a training manual, certification program, and an extensive FFT implementation and adherence protocol. The modality is multi-systemic, focusing on multiple domains both within and outside the family. It first emphasizes developing family functioning from within; then incorporates other social systems in the family's natural environment. FFT is also systematic and flexibly structured (Alexander & Sexton, 2002) as described below. Finally, Sexton and Alexander (2005) state that FFT is based on "respect and (a) strength-based belief in people" (p. 179).

The clinical model for Functional Family Therapy involves three intervention and assessment phases across time: Early, Middle, and Late. Each phase includes ongoing assessment and has goals including engaging and motivating the family, changing behavior within the family, and generalizing the changes made to the family's natural environment. FFT focuses on assessing family functioning versus using individualized diagnostic assessments on members of the family (Sexton & Alexander, 2000). Assessment in FFT is used to understand "the ways in which behavioral problems function within family relationship systems" (Sexton & Alexander, 2000, p. 4). FFT also emphasizes parental supervision and involvement as a mechanism for change within the family (Sexton & Alexander, 2000).

Functional Family Therapy was originally used with juvenile delinquents who were mostly middle class, first-time offenders (Alexander & Parsons, 1973). Since that time, it has been expanded to use with serious juvenile offenders and their families who have lower socioeconomic status. Although FFT has historically been used as intervention for families, some clinicians are now beginning to use it as a prevention program for siblings, youth, and their families who have not yet entered the juvenile justice system (Sexton & Alexander, 2000). FFT is currently offered by agencies through outpatient services or provided in-home. Gordon, Arbuthnot, Gustafson, and McGreen (1988) assert that home-based services are more effective as they eliminate no-shows, are less stigmatizing, and assessment is more accurate in the family's natural environment.

Average duration of service ranges from 8 to 12 sessions per family for milder cases over a three month period. For more difficult cases, up to 30 hours of direct service can be expected including meetings with community resources, therapy sessions and phone calls (Sexton & Alexander, 2000). Sessions are highly structured and led by the therapist while skills can be taught and practiced in each session. Assignments between sessions are encouraged for the family to work towards additional change in behaviors.

Therapists must be available to the families with whom they work, flexible, and competent in working with families, and they traditionally have smaller caseloads (usually 10-12 cases per

therapist). Therapists are certified with an FFT training model and receive ongoing supervision. Each clinician attends a clinical training component, as well as training specific to the use of FFT computer software. In addition, they have follow-up trainings and receive weekly phone supervision via FFT consultants. Supervisors and team leaders also receive intensive training in the modality.

FFT: Research Base

This report addresses six peer-reviewed, published FFT studies. Two have quasi-experimental designs, two are follow-ups of previous studies, and two utilize random assignment. Thus, FFT has the weakest research base of the four models discussed. FFT does have a well-developed fidelity protocol.

In one of the first studies by Alexander and Parsons (1973) (#1), 86 juvenile offenders (ages 13 to 16 years old) were randomly assigned to either Functional Family Therapy (n=46), no treatment (n=10), client-centered family groups (n=19), or a psychodynamic family program (n=11). Participants included 38 juvenile males and 48 juvenile females, but information was not available to delineate how many males and females were assigned to each specific group. The authors asserted that in order to insure random assignment, demographics were used to compare race, ethnicity, socioeconomic status, age, etc. However, demographic information including ethnicity and socioeconomic background was not documented in the study. Moreover, information regarding attrition was not noted. [These, as well as an unequal number of participants in each group present serious methodological problems.

The hypothesis of the study was that FFT would significantly reduce recidivism while the control groups would show no reduction in recidivism (Alexander & Parsons, 1973). After completion of FFT and control group measures, researchers followed the families at 6 to 18 month intervals. The follow-up measures concluded that the FFT families had a re-offense rate of 26%, compared to a 50% re-offense rate for no treatment, 47% re-offense rate for the client-centered family groups, and a 73% re-offense rate for eclectic psychodynamic family therapy. Although recidivism was not eradicated, a reduction was demonstrated.

Klein, Alexander, and Parsons (1977) (#2) further explored using FFT to prevent recidivism and sibling delinquency. They hypothesized that FFT could be used as a preventative tool as well as an intervention tool. Furthermore, they also posited that the focus of the change is the entire family system, not individuals within the family. Thus, siblings of the offenders who were treated using FFT in their 1973 study were examined by looking at computerized court records to track court referrals since FFT involvement in 1973. Two to 3 years after family involvement, findings indicated that siblings in FFT families had a 20% court referral rate compared with 40% of siblings in the no treatment group, 59% court referral rate in the client-centered therapy family therapy group and 63% referral rate in the eclectic-psychodynamic group (Klein et Al., 1977) (#2). Moreover, this study suggested a “viable program evaluation model using a three-level evaluative process focusing on the tertiary (remediation), secondary, and primary preventative functions of a single intervention program” (Klein et al., 1977, p. 473).

Barton et al. (1985) (#3) extended the study of FFT to new populations and new treatment contexts. However, unlike previous studies, they utilized undergraduate students to perform FFT and evaluated its effectiveness with juvenile offenders and their families. Eight undergraduate students were trained in the FFT model and worked collectively with twenty-seven families referred to them by the court. The average number of sessions with families was 10.3 sessions. Information regarding attrition, race, gender, or ethnicity was not noted. After one year, the recidivism rate of FFT families 26%. Those juvenile offenders and families who received only probation had a recidivism rate of 51% (Barton et al., 1985).

Additionally, in this same study, juvenile offenders at risk for out of home placement were introduced to FFT. In the State of Utah, several state workers and probation officers were trained to implement FFT into their own casework and then to “perform an evaluation of the effectiveness of the procedure for their own professional decision making and caseload management” (Barton et al. 1985, p. 20). Results showed that those trained in FFT had an out-of-home placement rate drop from 48% to 11%. Furthermore, the study “allowed for an evaluation of additional generalizability across therapists and minor population variations” (Barton et al., 1985, p. 18).

In the final component of this study, Barton et al. (1985) (#3) hypothesized that seriously delinquent adolescents with repeat offenses could reduce recidivism rates utilizing FFT. One hundred three adolescents were assigned to one of three groups: FFT (n=30); alternative treatment (n=44); and a control group (matched sample, n=29). State workers who were aware of FFT and its treatment model and goals referred youth to FFT based on their eligibility to return to a community living arrangement (Barton et al., 1985). Through sampling, the authors indicated that demographics for the control groups were equivalent to the FFT treatment group. The control sample included juveniles who were 65% white, 35% non-white, and primarily lower to middle class socioeconomic status. Attrition rates were not noted. Results showed that the FFT group had a 60% recidivism rate while the alternative treatments had an 89% recidivism rate. The authors concluded that these results indicated that the model is transportable, can provide valuable results with good supervision, showed clinical cost benefits, and was effective when compared to other alternative treatments with difficult populations (Barton et al., 1985).

Gordon et al. (1988) (#4) conducted a study to determine the effectiveness of home-based FFT. A quasi-experimental design was used with non-random assignment of participants to groups (court ordered). Twenty-seven juvenile offenders received in-home FFT (court ordered) and twenty-seven juvenile offenders received probation (control group). In the FFT group, there were 15 males and 12 females, and in the comparison group, there were 23 males and 4 females. All participants were Caucasian and most were lower to middle class. The median number of FFT sessions was 16. FFT sessions lasted one and one-half hours on average with treatment lasting up to five and one-half months. Fifteen percent of families participating in FFT had early termination of treatment and the attrition rate was 4%. FFT therapists in this study were graduate students with intensive training and supervision. The purpose of the supervision was to ensure treatment integrity and adherence.

At a two year follow up, juveniles who had participated in FFT had an 11% recidivism rate while those who had probation had a 67% recidivism rate (Gordon et al., 1988). In a follow-up

study by the same authors in 1996, they followed the juveniles into adulthood to again look at recidivism rates after utilization of FFT. Five years after participation in FFT, participants had a 9% recidivism rate as adults, compared to 41% recidivism rates for those who were in the probation condition. (Gordon et al., 1996).

In 2001, Waldron, Slesnick, Brody, Turner, and Peterson studied treatment outcomes for adolescent substance abuse using FFT (#6). Participants were randomly assigned to FFT (n=30), cognitive behavioral therapy (n=31), joint FFT and CBT (n=29), and group therapy (n=30). There were 24 males and 6 females in FFT, 25 males and 6 females in the CBT, 22 males and 7 females in the joint FFT / CBT group, and 25 males and 5 females in group therapy. Ages ranged from 13 to 17 years old and the mean was approximately 15 years old across all four groups. Ethnicities in the FFT group included 14 Hispanics, 14 Caucasians, and 2 Native Americans. Ethnicities in the CBT group included 17 Hispanics, 9 Caucasians, 3 Native Americans, and 2 participants labeled in the “other” category. Ethnicities in the joint FFT/ CBT group included 14 Hispanics, 11 Caucasians, 1 Native American, and 4 participants labeled in the “other” category.

Families were offered 12 hours of therapy in all but the joint treatment modality. In the joint FFT/ CBT intervention, 24 hours of therapy were allowed. Some flexibility for extra therapeutic time was given for crisis situations. Families completed assessment at pre-test, four month follow-up, and seven month follow-up. Seven families were dropped from the research sample because, although they agreed to participate, they did attend any therapy sessions. Eleven families ended treatment prematurely, but 10 of these families completed all follow-up assessments, thus their data were included in all analyses of the study (Waldron et al., 2001). Six families did not complete either follow-up assessment and these families were removed from later analyses, leaving 114 families in the final analysis. Because pretreatment results showed much higher rates of marijuana use than alcohol and other drugs, the authors chose to focus only on youth marijuana use.

Results for the Waldron et al. (2001) (#6) study indicated change from heavy to minimal use from pretreatment assessment to four and seven month follow-up. Four months after treatment was initiated, FFT adolescents changed use patterns of marijuana from 86.6% pretreatment to 55.2% after FFT. Adolescents using CBT changed their use from 96.8% pretreatment to 72.4% after CBT. Those engaged in FFT and CBT changed their use from 89.7% pretreatment to 55.6% after joint FFT and CBT. Changes were not found in the group condition.

Seven months after treatment was initiated, FFT adolescents use of marijuana was found to be 62.1%, while adolescents involved with FFT and CBT use pattern was 55.6%. Those receiving group therapy treatments had marijuana use decline to 69%. At 7 months post treatment, changes were not found using CBT only (Waldron et al., 2001).

FFT: Fidelity

FFT has a significant fidelity protocol. Specifically, FFT supervision focuses on two issues, adherence to the model and competent delivery of the core elements of the model. Follow-up

training is also provided and weekly phone supervision helps to maintain clinical continuity. FFT uses four methods to monitor and track fidelity:

1. Therapist Progress Notes
2. Counseling Process Questionnaire
3. Supervisor Ratings
4. Service Delivery Profiles

While fidelity protocol has not been consistent over the 30 years of FFT inquiry, there has been some attempt to include this component of methodology in most studies. In Alexander and Parsons (1973) (#1), fidelity protocol included four week intensive training for graduate students, live supervision (with one-way mirrors), and bi-weekly group supervision. Students received an average of six hours of supervision /training each week. Fidelity protocol in the first phase of Barton et al. (1985) (#3) included intensive FFT training, observation, role-play, and live supervision of therapy sessions or supervision with audio-taped therapy sessions. During the second phase of this inquiry, fidelity protocol only involved one week of voluntary training for state workers. The third phase made no mention of any fidelity measures.

Fidelity protocol in Gordon et al. (1988) (#4) included 10 weeks of clinician training, weekly supervision by a behaviorally oriented child clinical psychologist (first author), classroom discussion of audio taped therapy sessions, and one hour of direct service provider supervision per week. Because studies number two and five were follow-up inquiries in regard to previous studies, fidelity protocol was not mentioned. In the study by Waldron et al. (2001) (#6), adherence and fidelity measures included manuals, session checklists, videotaped treatment sessions, supervision, adherence checklists, and monthly supervisor/therapist meetings to coordinate treatment efforts. As opposed to previous studies, Waldron et al. (2001) (#6) appeared to have many more protocols in place. Overall, other than in Waldron et al. (2001) (#6), most of the measures utilized in these aforementioned studies of FFT utilize supervision and training as the main components of treatment fidelity.

Currently, FFT uses the Functional Family Assessment Protocol and the Clinical Services System (CSS), which is a computer-based monitoring and tracking system, for model, adherence, and outcome assessments (Sexton & Alexander, 2000). The CSS tool is used to record demographics, client contacts, assessment information, track goals, follow adherence measures, and track outcomes to ensure implementation is successful. These measures are used to ensure program fidelity.

FFT: Strengths and Weaknesses

The Functional Family Therapy model has several strengths. It has been researched for over 30 years, with more recent studies having a significant fidelity protocol. FFT has also been shown to work with both pre-delinquent youth (preventative) as well as those with very serious issues and crime records (intervention). This model utilizes a great deal of supervision to support clinicians in their work with families. Furthermore, in recent years, the FFT-CSS computer system offers additional support to clinical staff with assessments, outcome accountability, and supervision.

Given the high costs of incarceration and court services, FFT can be a cost-effective alternative for communities with decreased recidivism rates as mentioned by Sexton and Alexander (2002). These authors assert that while FFT treatment costs can average between \$700 and \$1,000 per family, the average cost for incarceration or residential programs can cost \$6,000 to \$13,500 (Sexton & Alexander, 2000).

On the other hand, while Sexton and Alexander (2000) contend FFT can be cost-effective, implementation and training costs of FFT can be very high. It can cost approximately \$20,000 or more for first year start-up costs. Some agencies estimate it can cost approximately \$2000 or more per family (www.strengtheningfamilies.org). A yearly fee is also required to maintain FFT certification.

Moreover, considering the model has been closely followed for over 30 years, there are only a handful of studies available that show model effectiveness. Of those studies, only two appear to show a solid experimental design using random assignment of subjects (Alexander & Parsons, 1973; Waldron et al., 2001). Also, only one study extended follow-up recidivism rates for juvenile offenders who participated in FFT beyond 3 years into adulthood (Gordon et al., 1996).

Furthermore, empirical data has only been collected for FFT with youth ages 11 to 18 and does not provide data to show effectiveness with younger children (primary client) and their families. In addition, it does not appear as if FFT has been studied with families of youth with SED. Moreover, although proponents of FFT report that the model has generalizability to other various population variations, Alexander and Sexton (2000) emphasize that strict adherence to the model is imperative or the clinician can do more harm than good.

Table IV– Functional Family Therapy

Citation	Description of Study	Pertinent Findings
(#1) Alexander, J.F. & Parsons, B.V. (1973). Short-term behavior interventions with delinquent families: Impact on family process and recidivism. <i>Journal of Abnormal Psychology</i> , 8, 219-225.	<p>N=86 court-referred juveniles—Randomly assigned, Experimental design; time limited (10-12 weeks)</p> <ul style="list-style-type: none"> -46 juvenile offenders received FFT -19 juvenile offenders received client-centered family groups -11 juvenile offenders received a psychodynamic family program -10 juvenile offenders received no treatment <p>To insure random assignment, juveniles were compared on demographic variables, prior recidivism rates, and pretest scores on 3 interaction measures.</p>	<p>At 6-8 month follow-up, FFT families had re-offense rate of 26%, compared to 50% for no treatment, 47% for the client-centered family group, and 73% for eclectic psychodynamic family therapy group.</p> <p>Fidelity measures included training graduate students four-week intensive training, live supervision (with one-way mirrors), and biweekly group supervision. Average 6 hours of supervision / training each week.</p>
(#2) Klein, N., Alexander, J., & Parsons, B. (1977). Impact of family systems intervention on recidivism and sibling delinquency: A model of primary prevention and program evaluation. <i>Journal of Consulting and Clinical Psychology</i> , 45, 469-474.	<p>Follow up on siblings of juvenile offenders in above study.</p> <p>Retrieved court records and other demographic information to compare sibling court referral rates.</p>	<p>2-3 years post treatment, siblings in FFT families had 20% court referral rate, compared with 40% in the no-treatment group, 59% in the client-centered family therapy group, and 63% in eclectic-psychodynamic group.</p>
(#3) Barton, C., Alexander, J.F., Waldron, H., Turner, C.W., & Warburton, J. (1985). Generalizing treatment effects of functional family therapy: Three replications. <i>American Journal of Family Therapy</i> , 13, 16-26.	<p><i>3 part study to replicate FFT in different populations</i></p> <p>1)-27 juvenile offenders and families were court referred to participate in FFT; quasi-experimental design (no random assignment).</p> <p>Undergraduate students were trained to utilize FFT with families.</p>	<p>1) At one year, juvenile offenders treated by FFT undergrads had a 26% recidivism rate vs. a 51% recidivism rate for those receiving only probation.</p> <p>Fidelity measures included intensive FFT training, observation, role-play, and live</p>

	<p>2) N=279 juveniles at-risk for out-of-home placement; quasi-experimental with no random assignment apparent -63 juveniles received services from State workers trained in FFT -216 juveniles received services from State workers without FFT training.</p> <p>3) N=74 seriously delinquent juvenile offenders with multiple offenses; State workers selected juveniles for FFT and control group based on worker judgment and similarities with severity of offenses and demographics; quasi-experimental design with no random assignment. -30 juveniles referred to FFT by State workers familiar with FFT. -44 juveniles were referred to alternative treatments.</p>	<p>supervision of therapy sessions or supervision with audio taped sessions.</p> <p>2) State workers trained in FFT had out of home placement rate drops from 48% before FFT training to 11% after FFT training.</p> <p>Fidelity measures included one week of training for State workers (voluntary participation). FFT trained workers cases were compared to non-FFT trained workers to show results.</p> <p>3) Seriously delinquent juvenile offenders who received FFT group had a 60% recidivism rate, whereas those in the alternative re-entry programs had a 89% recidivism rate.</p> <p>No fidelity measures were mentioned.</p>
(#4) Gordon, D.A., Arbuthnot, J., Gustafson, K.E., & McGreen, P. (1988). Home-based behavioral-systems family therapy with disadvantaged juvenile delinquents. <i>American Journal of Family Therapy</i> , 16(3), 289-303.	<p>N=54 – Juvenile offenders and their families were court-ordered to participate in FFT (n=27) versus receiving probation (n=27; control group). -quasi-experimental design with non-random assignment; open-ended timeframe for</p>	<p>At 2 year follow-up, juvenile offenders and families receiving FFT had an 11% rate of recidivism, while those receiving probation only had a 67% rate of recidivism.</p> <p>Fidelity measures included 10 weeks of</p>

	treatment.	clinician training, weekly supervision of families by a behaviorally oriented child clinical psychologist (senior author), classroom discussion of audio taped therapy sessions, and one hour direct supervision per week.
(#5) Gordon, D.A., Graves, K., & Arbuhtnot, J. (1996). The effect of functional family therapy for delinquents on adult criminal behavior. <i>Criminal Justice and Behavior</i> , 22, 6-73.	Follow-up of juvenile offenders in above study (#4) to determine effects of FFT on adult criminal behavior.	At 5 year follow-up, juveniles who received FFT had a 9% recidivism rate as adults, while juveniles who received probation only had a 41% recidivism rate as adults.
(#6) Waldron, H.B., Slesnick, N., Brody, J.L., Turner, C.W., & Peterson, T. R. (2001). Treatment outcomes for adolescent substance abuse at 4 and 7-month assessments. <i>Journal of Consulting and Clinical Psychology</i> , 69 (5), 802-813.	<p>N=120 juveniles (ages 13 to 17) referred to program by court order, condition of probation, or by schools in lieu of suspension or other consequences to determine treatment outcomes for adolescent substance abuse</p> <p>-after initial assessment, participants were randomly assigned to different treatment groups:</p> <p>-30 juveniles referred to FFT.</p> <p>-31 juveniles referred to CBT.</p> <p>-29 juveniles referred to joint FFT and CBT.</p> <p>-30 juveniles referred to group intervention.</p>	<p>Follow-up assessments were given 4 months after initiation of treatment. Wilcoxon's sign test showed change from heavy to minimal use of marijuana:</p> <p>-Use changed from 86.6% pretreatment to 55.2% after FFT.</p> <p>-Use changed from 96.8% pretreatment to 72.4% after CBT.</p> <p>-Use changed from 89.7% pretreatment to 55.6% after joint FFT and CBT.</p> <p>-Changes were not found in the group condition.</p> <p>Follow-up assessments were given again at 7 months after initiation of treatment. Wilcoxon's sign test showed change from heavy to minimal use of marijuana</p> <p>-Use declined to 62.1% after treatment with</p>

		<p>FFT.</p> <ul style="list-style-type: none"> -Use declined to 55.6% after treatment in joint FFT and CBT. -Use declined to 69% after group treatment. -Changes were not found using CBT only. <p>Fidelity measures included manuals, session checklists, videotaped treatment sessions, supervision, adherence checklists, and monthly supervisor/therapist meetings to coordinate treatment efforts.</p>
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Table V Summary of MST, BSFT, FFT, and MDFT

Modality	Population Served	Frequency/ Location of Worker Contact	Overall Quality of Research	Cost	Transportability
Multisystemic Therapy	-Largely juvenile offenders, youth with substance abuse problems - Some application with maltreating families, sex offenders, SED youth	-Available 24 hours per day, seven days per week for three to five months -Services delivered in the community	-Diversity of application – JOs, substance abuse problems, sex offenders, SED youth, maltreating parents -Most studies utilize random assignment -Little replication outside of MST organization -Treatment adherence is component of research, not always consistently applied	Leschied (2002) reports the first and second year of a four year study were \$70,000 and \$115,000, respectively. While MST Services Inc. estimates the cost per case to be \$4,500, the average cost per case in the Ontario study was well over \$25,000.	-Somewhat limited – much of research base is specific to juvenile offenders and youth who experience substance abuse -Considerable expense involved in licensing re: use of model
Brief Strategic Family Therapy	Largely juvenile offenders, youth with substance abuse problems	-Weekly to twice per week for three months -Services are clinic based	-Less diversity of application – used largely Hispanic juvenile offenders, substance abusers -Random assignment consistently utilized -No replication found outside of BSFT organization -Varying levels of treatment adherence, however, treatment adherence is high in engagement studies	-A one year training package costs approximately \$20,000. This includes a 3-day BSFT workshop, monthly phone supervision, and a follow-up 2-day skill development workshop (www.strengtheningfamilies.org)	-Limited – most research has been done with urban youth who are members of minority groups -Considerable expense involved in licensing re: use of model

Multidimensional Family Therapy	Largely youth with substance abuse problems	<ul style="list-style-type: none"> -Weekly for up to six months -Services are clinic or community based 	<ul style="list-style-type: none"> -Research largely specific to youth with substance abuse problems; urban, minority groups -Most consistent application of treatment adherence protocols 	Unable to locate	<ul style="list-style-type: none"> -Much of research base consists of urban, minority youth -Cost of utilization?
Functional Family Therapy	Largely juvenile offenders, youth with substance abuse problems	<ul style="list-style-type: none"> -Weekly for three months, up to 30 hours of direct service for more difficult cases -Services are clinic and community based 	<ul style="list-style-type: none"> -Limited research based compared to other models -Research specific to juvenile offenders and youth with substance abuse problems -Well-developed treatment adherence protocol 	-\$20,000 for first year start up (www.strengtheningfamilies.org)	-Considerable expense involved in licensing and use of model

The State of Family Therapy and Current Family Therapy Initiatives in Kansas

Survey of Kansas Community-Based Services (CBS) Directors

An informal telephone survey was conducted in October and November of 2006 to better understand the perceptions and needs of Kansas CBS programs in reference to involving families in service delivery to SED children. Twenty of the twenty-seven Community Mental Health Centers that provide CBS were able to be contacted. At least four attempts were made to reach all CMHC CBS Directors. The questions asked, and a summary of responses follows in narrative as well as table form (Table VI).

1) *“What percent of SED children receiving CBS programming at your CMHC receive family therapy?”*

Answers ranged from 3% to 90%. Two mental health centers reported minimal family therapy and two mental health centers reported that they did not know the answer to this question. The average answer was 30.15% and the median was 20%. Four mental health centers reported 80% or more of SED children and families receive family therapy, and 9 mental health centers reported 30% or less.

2) *“What percent of SED children and their families at your CMHC receive home-based family therapy?”*

Answers ranged from 0% in 5 mental health centers to 70% or 80% in others. The average answer was 6.625% and the median was 3.5%. Three mental health centers reported 25% or more of SED children and families received in-home therapy while 13 mental health centers reported 5% or less.

3) *“How many home-based family therapists does your CMHC employ?” and “What is the average size of each therapist’s caseload?”*

Answers for numbers of home-based therapists ranged from zero to five. The average number of home-based therapists was less than two. Nine mental health centers reported that they did not employ any home-based therapists and one center reported one half-time position. Seven mental health centers reported 3 or more home-based therapists. Nine CMHCs reported that they did not have any home-based cases and one reported they did not know how many home-based cases they had. The average size caseload across all twenty mental health centers was 2.8%. Eight mental health centers reported average caseloads for home-based therapy of 3 or more.

4) *“What is the most common model of family therapy utilized by therapists who serve your SED children?”*

Two mental health centers reported no utilization of a family therapy model at the current time and 3 reported that they did not know what model was used. The remainder of the answers

included Multisystemic Therapy, Family-Directed Structural Therapy, family structural therapy, brief-structural therapy, structural therapy, cognitive-behavioral therapy, strengths-based approach, systems theory, family systems theory, Solution-Focused Therapy, strategic therapy, Bowenian Theory, and an eclectic mix of therapies. Two CMHCs reported using Family-Directed Structural Therapy, and eight CMHCs reported using some form of Structural Therapy.

5) *“Would your CBS staff benefit from training in a family-centered model?”*

Eighteen mental health centers believed that their CBS staff would benefit from training in a family-centered model. One CMHC reported “Maybe,” and one wanted more information.

6) *“Would clinical staff benefit from and be interested in training in a family-centered model?”*

Seventeen mental health centers reported that they would be interested in training in a family-centered model for their clinical staff. One CMHC reported “maybe”, and one reported “perhaps.” One mental health center that was interested in training stated that they wanted the training to be evidence-based.

7) *“How would you describe the relationship between clinical and CBS staff? Excellent? Good? Needs Improvement?”*

Five mental health centers reported that the relationship between clinical and CBS staff was “excellent,” ten reported that the relationship was “good,” and three reported that their relationships “needed improvement.”

8) *“Would you describe your CBS services as client-centered or family-centered?”*

Six mental health centers reported that their CBS services were family-centered while 8 mental health centers reported their CBS services were client-centered. Six mental health centers reported that their CBS services were both client-centered and family-centered.

Additionally, within the context of this survey, community mental health centers were asked if they were satisfied with the CBS population’s utilization of family therapy. Six CMHCs responded “Yes” that they were satisfied with the utilization of family therapy. One CMHC was not able to answer the question and two reported that there could be more or that they were “semi” satisfied. Eleven CMHCs reported that they were not satisfied with the CBS population’s utilization of family therapy.

9) *“What barriers do you see to involving families in CBS services? How would you address these barriers?”*

After review, responses to these questions were placed in 4 categories that best described their overall content. These categories consisted of the following: education and training for staff; education and training for families; transportation and scheduling; and state or agency policy. Many of the respondents gave two responses which were categorized as “Response One”

or “Response Two”. There were a total of thirty-five barriers identified as either response one or response two. These will be discussed in three categories.

There were **14 barriers related to family engagement which were conceptualized as originating from family attitudes and values**, including: “perception of the parents that the child is the problem”; “lack of family engagement”; “not wanting people in their (families’) homes”; “fear of outsiders”; “client versus clinical expectations with emphasis from clients to treat the child”; “unwillingness to come into the office”; and “availability of family to have time to participate in treatment of the child”. Examples of ways to overcome the barrier included: “therapist, case manager, and parent support specialist educating family as to need for family to participate in treatment”; “more home based therapy”; “strategic intervention utilizing review of treatment plan to educate family”; and “training and education for staff to develop model to involve family and work toward engagement regarding mutual issues.”

There were **nine state or agency issues or policies identified as barriers** to family involvement. Examples included: “distance to services and hours available to schedule meeting times with families”; “distance and cost of travel to deliver services”; “lack of availability of staff and need for evening appointments”; “billing and transportation barriers”; “difficulty recruiting in-home therapist, payment for services and high number of out of catchment area children”. Examples of ways to overcome these barriers included: “reimbursement for mileage to compensate for cost of travel”; “more in-home therapy and transportation provided by agency”; “combination of more family therapy both home-based and out-patient”; “change Medicaid billing and tiered compensation for different distances traveled”; “provide employment-based practicum and scholarship opportunities to advance training in family therapy”; and “more satellite office time”.

There were **six staff training and education barriers identified**. Examples included: “finding staff to deal with multi-family problems”; “child presence in session may interfere with process at times”; “lack of clear definition of family therapy”; “need for more family therapy staff”; “lack of education regarding best practice models for family therapy and lack of performance standards”. Examples of ways to overcome the barriers included: “training for staff and more community awareness to utilize community resources”; “more master level case managers, case management training in adult and child interventions”; “more therapists with family therapy training”; “training in home-based therapy models”; and “training for staff in brief family therapy models”.

The final category was **transportation and scheduling** which included six responses. Examples of these barriers included: “coordination of client and therapist schedules”; “transportation”; “lack of evening appointments”; “lack of flexible schedules and lack of family ability to schedule time together”. Examples of ways to overcome the barriers included: “more evening time”; “facilitate schedules by person such as case manager or wrap-around coordinator”; and “more flexible appointment times”.

In summary, the respondents indicated major barriers with client education and policy issues and an equal number of barriers related to staff training, and transportation and scheduling issues. While there were a number of suggestions regarding ways to overcome identified

barriers, there was an emphasis on staff training in family therapy, including the value of family therapy; educating families about the value of family therapy; more flexible scheduling; and creative reimbursement that takes into account travel time.

Table VI- Telephone Survey of Kansas CBS Directors

Summary of Responses in Reference to Family Involvement in Children's Services

CMHC	#1) % of SED children receiving family therapy?	#2) % of SED children receiving home-based family therapy?	#3a) Number of home-based family therapists?	#3b) Average number of cases per home-based family therapist?	#4) Model of family therapy utilized with SED children and their families?	#5) CBS staff benefit from training in a family-centered model?	#6) Clinical staff interested in training in a family-centered model?	#7) How would you describe the relationship between clinical and CBS staff?	#8) Would you describe your CBS services as client-centered or family-centered?
1	35	10	0	0	None	Yes	Yes	Excellent	Both
2	85	0	1	3	Did not Know	Yes	Yes, If Evidence Based	Needs Improvement	Client
3	3	0	0	0	None	Yes	Yes	Needs Improvement	Family
4	90	5	2	6-8	Structural	Yes	Yes	Good	Client
5	15	1	3	3-4	Structural	Yes	Yes	Same Staff	Client
6	Did Not Know	0	0	0	Did not know	Maybe	Maybe	Good	Family
7	5	5	3	3	Cognitive Behavioral	Yes	Yes	Excellent	Family
8	10	3.5	2	7	Behaviorally Based	Yes	Yes	Needs Improvement	Client
9	10-20	7/8	0	0	Cognitive Behavioral	Yes	Yes	Good	Client
10	20	10	0	0	Structural	Yes	Yes	Good	Both
11	Minimal	Minimal	0	0	Family Systems	Yes	Yes	Good	Client
12	50	30	4	Did Not Know	Multisystemic and Brief Structural	Yes	Yes	Same Team	Both
13	10	0	0	0	Did not know	Yes	Yes	Good	Client
14	Minimal	Minimal	5	6	Solution-	Yes	Yes	Excellent	Family

					Focused, Structural, Family- Directed Structural Therapy				
15	50	25	6	6-10	Structural Family Systems, Family- Directed Structural Therapy	Yes	Yes	Good	Both
16	Did Not Know	25	4	10-12	Strengths	Yes	Yes	Good	Both
17	30	0	0	0	Systems	Yes	Yes	Excellent	Client
18	90	06	1-2	2	Strategic, Structural, Bowen	Yes	Some	Good	Family
19	80	03	3	1	Eclectic	Yes	Yes	Excellent	Both
20	30	01	0	0	Structural	Need More Info	Perhaps	Excellent	Family

Family-Directed Structural Therapy Outcome Study

As a part of the FY 2006 contract, University of Kansas staff trained certain CBS providers at Pawnee Mental Health Services and Johnson County Mental Health Center in the use of Family-Directed Structural Therapy (FDST) and a corresponding assessment tool. This project was specifically designed to strengthen and enhance service delivery to SED children and their families through use of a shared language and approach (FDST and assessment tool) by the entire CBS team, including case managers, outpatient therapists, and in-home therapists. FDST is a family-based helping modality that has been developed over the past twenty years. The FDST assessment tool, which is completed by adult family members, allows them to rate themselves on five relationship issues (commitment, credibility, empowerment, control of self, and consistency), roles, and external stressors. Using these scores and a framework of interaction that offers suggestions regarding ways to bring about positive change, service providers guide families to identify strengths upon which to build and areas of concern which the family would like to address. This assessment tool and helping modality comprise a goal-oriented, time limited process that empowers the family through the identification of strengths and the provision of concrete skills via the use of a common vocabulary and the concretely organized, easily administered tool that is completed by the family (McLendon, McLendon, & Petr, 2005).

Through this project it was demonstrated that services providers could learn to use the modality, they endorsed its use, and families indicated they liked the model and recommended its use with other families. Therefore, during FY 07 an FDST outcome evaluation is being conducted at both CMHCs. Outcomes measures are being collected from families who receive usual CBS services and FDST and/or the assessment tool from FDST trained service providers. FDST assessment tool scores and Family Adaptability and Cohesion Evaluation II (FACES II) are being collected at baseline, 3 months post baseline, and 6 months post baseline; and Child Behavior Checklist (CBCL) scores are being collected at baseline and 6 months post baseline. These families are being compared to families who receive only usual CBS services, via FACES II collection at baseline, post 3 months baseline, and post 6 months baseline; and CBCL collection at baseline and 6 months post baseline. It is estimated that each group will contain approximately 30 families. Finally, FDST supervision sessions are being audio tape recorded and analyzed to document fidelity to the model.

Home-Based Family Therapy Partnership

The Home-Based Family Therapy (HBFT) Partnership was established through a contract between the Family Center at Kansas State University and the Kansas Department of Social and Rehabilitative Services, with the purpose of promoting and refining a best practices perspective for home-based family therapy. Another goal of this work is to assist home-based family therapists to utilize evidence-based principles in their work with families (Retrieved February 28, 2007, from <http://www.hbftpartnership.com/defaultit.aspx?action=set&res=1120>).

The HBFT Partnership website states,

The notion of partnerships is key to this work and occurs on multiple levels.
The first level of the partnership is between the Community Mental Health

Center (CMHC) CBS Directors, SRS, and the KSU trainers/consultants/supervisors. The HBFT Coordinating Committee serves as a liaison between KSU and SRS/CMHC. The second level of the partnership is between the Home-Based Family Therapists and the KSU trainers. The third level of the partnership is between the Home-Based Family Therapist and the client family who is central to all partnership levels (Retrieved February 28, 2007, from <http://www.hbftpartnership.com/defaultit.aspx?action=set&res=1120>).

The HBFT Partnership offers an annual two-day core training, an annual one-day teleconference, as well as monthly telephone supervision occurring on the third and fourth Monday and third and fourth Tuesday of each month. Additionally, the HBFT website offers interactive training modules, with topics including therapeutic skills, therapist self-care, family issues, and supervision (Retrieved February 28, 2007, from <http://www.hbftpartnership.com/defaultit.aspx?action=set&res=1120>). To date, 56 home-based family therapists have participated in the two day core training (Nancy O'Conner, personal communication, February 24, 2007).

Implications for Policy and Practice in Kansas

There is considerable research support for the family therapy models of MST, BSFT, FFT, and MDFT. However, before recommending that they be adopted as evidence based practices in Kansas, it is important to point out that the vast majority of the research on these models has been conducted with youth who experience problems with substance abuse and conduct disorder. Also, these youth are largely involved in the juvenile justice system, not the mental health system. There are practically no evidence-based outcomes which apply integrative models of therapy to families of youth with disorders other than substance abuse and Conduct Disorder. While research with these youth is valuable, it does not address the needs of families with children who experience numerous other psychiatric disorders.

In Kansas, for example, of approximately 32,000 child Medicaid claims made by CMHCs in 2006, 17% were for Attention Deficit Disorder/Attention Deficit Hyperactivity Disorder, 14% were for Adjustment Disorders, 11% were for Mood Disorders, 9% were for Oppositional Defiant Disorder, and 7% were for Bi-Polar Disorders. Only 11% were for substance abuse/dependence and only 9% were for Conduct Disorder. The majority of remaining claims included Anxiety Disorders, Schizophrenia, and Developmental Disorders (Personal communication, Harvey Hillin, March 5, 2007). This disconnect between the research base and the needs of Kansas youth and families warrants the investigation of models specifically suited to their particular needs.

Moreover, research specific to these four models has been conducted in very urban areas with populations not reflective of Kansas demographics. For example, the vast majority of BSFT work has been done with Hispanic youth, most of the research base for MDFT involves groups in which African American and Hispanic youth are in the majority, and in several MST studies African American youth are in the majority. Racial and ethnic breakdown is not consistently noted in FFT studies. While work and research with historically disenfranchised groups is extremely important, the identification of models which have been studied in settings more

consistent with the demographics of Kansas could be helpful. Specifically, 81.6% of people living in Kansas are defined as “White persons not Hispanic” and 69 of 105 Kansas counties are defined as “frontier” (less than 6 people per square mile) or “rural” (6 to 19.9 people per square mile) (Retrieved February 28, 2007, <http://quickfacts.census.gov/qfd/States/05/05017.html>). These characteristics point out the need for models of care which have been investigated in settings reflective of the State’s population.

Finally, all of these models are designed to be initiated and utilized by a professionally trained therapist. In Kansas, however, much of CBS service provision is delivered by case managers, not masters level trained therapists. This disconnect demonstrates the need for a modality that can be used by service providers with varying levels of training and experience.

Possible suggestions for the utilization of family therapy and family-centered intervention in the state of Kansas can be guided by the state’s emphasis on a Systems of Care philosophy as articulated by the Child and Adolescent Service System of Care (CASSP) (Retrieved February 28, 2007, from <http://www.srskansas.org/hcp/MH/MHCMH.htm>). One of the guiding principles of CASSP is family involvement in service provision to SED children (Lourie, Stroul, & Friedman, 1998). To this end, it would be beneficial for the state to work with CMHCs to overcome barriers identified in this report.

Specifically, some options the state could consider are:

1. In reference to the barrier of family engagement, components of BSFT engagement protocol could be examined to evaluate if any of them might be appropriate for Kansas families. McKay and colleagues (McKay et al., 2004; McKay, McCadam, & Gonzalez, 1996; McKay, Nudelman, McCadam, & Gonzales, 1996; McKay, Stowe, McCadam, & Gonzalez, 1998) have identified and examined several concrete techniques to improve family engagement in the therapeutic process. These techniques include a specific CMHC protocol for the initial help-seeking phone call to encourage parent participation and identify and address barriers to participation.
2. Agency and system barriers included distance to services and the cost of travel to provide in-home family services. Consistent with survey participants’ suggestions to overcome these barriers, perhaps the state could somehow address travel and mileage compensation to help facilitate the provision of in-home services. To highlight this issue, during FY 2006, Iroquois Center for Human Development CBS staff drove an average of 71 miles per child per month, with average non-reimbursable travel-related costs to the CMHC (mileage plus staff time) being \$4,155 (Retrieved March 9, 2007, from <http://www.socwel.ku.edu/occ/projects/cmh/Rural%20Presentation%20Jan%202007.pdf>).
3. Regarding staff training and education barriers, including a lack of education specific to family models, continued implementation and evaluation of Family-Directed Structural Therapy and the corresponding Assessment Tool would help facilitate staff education in this area. In light of the fact that 18 of 20 CBS directors indicated their staff would benefit from training in a family-centered model (of the two remaining CMHCs, one

reported “maybe,” and one wanted more information), a continued exploration of this model which has been developed in both rural and urban areas of Kansas would be appropriate. Further study and application of FDST in Kansas would not preclude exploration of other models which may be well-suited to the demographic characteristics of the specific population within a CMHC catchment area.

Continued growth and utilization of Kansas State University’s HBFT Partnership is important to maintain the effort to identify, promote, and refine best practices for home-based family therapy. Moreover, KSU’s effort to train, support, and provide continuing education to home-based family therapists is an important component in the provision of quality therapy services to the families of SED children.

Walter (2006) authored a Home-Based Family Therapy Best Practice Report which reinforces the importance of supervision in the provision of home-based family therapy, as well as the need to more clearly conceptualize models which are well-suited to this endeavor (Retrieved February 28, 2007, from <http://www.socwel.ku.edu/occ/projects/cmh/BestPracticesReport17.pdf>.) Walter notes,

There is comparatively little empirical and conceptual literature about the specific effectiveness and processes of home-based family therapy. Still, evidence indicated that in-home therapy, although not a panacea, can result in higher engagement and attendance, may be effective to maintain troubled youth in their homes, and may have a preventative effect if provided early. At the same time, in-home therapy posed particular challenges to providers who must be adequately prepared and supervised in order to adjust to, and utilize, the unique setting (p. 10).

Conclusion

This Best Practice report provides evidence for the value and effectiveness of family therapy and provides a foundation and guidance for further application and study of family therapy in the state of Kansas. Continued application and study of service provision models which incorporate the family, including home-based family therapy models, are consistent with the State’s mission to provide family-centered services to SED children. While models such as MST, BSFT, FFT, and MDFT offer impressive research bases, they have not been studied with populations that mirror Kansas demographics. Currently, there are initiatives underway at the University of Kansas and Kansas State University to improve and enhance the state of family-centered services for Kansas families with SED children. These initiatives, paired with the stated desire of CBS directors to procure family-centered training for their staff, create an opportunity to enhance family-centered service delivery.

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